AUG 30 1926

PAPER TRADE JOURNAL

Vol. LXXXIII, No. 9 AUGUST 26, 1926

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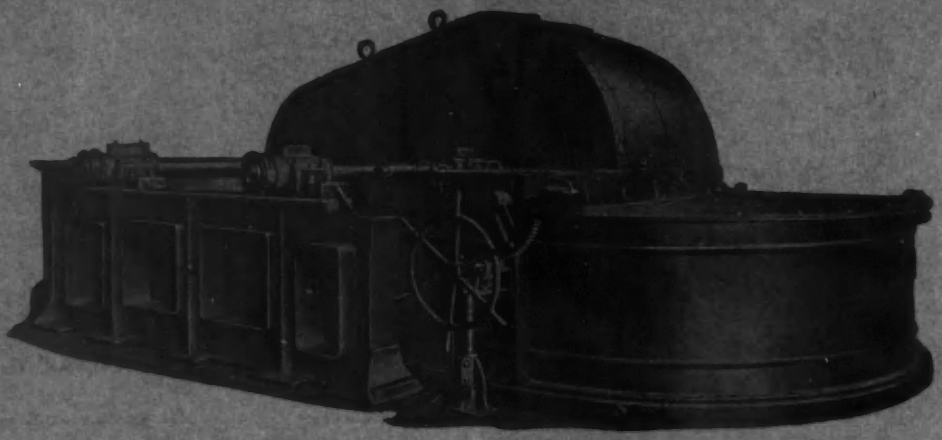

The following are a few of the results which have been determined by actual test:

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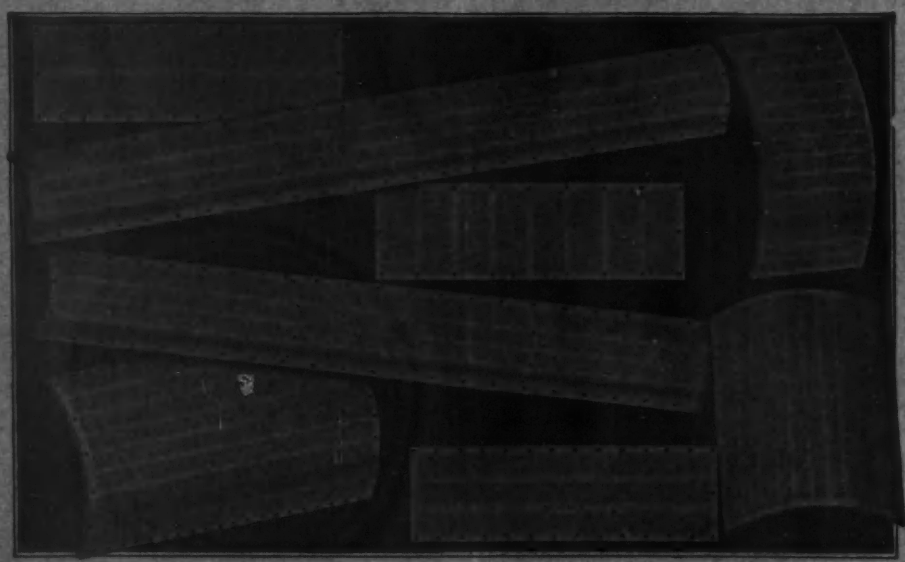

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PAPER TRADE JOURNAL

ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-FIFTH YEAR

Published Every Thursday by the

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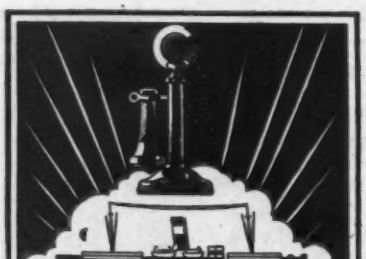

A LUMBER and mill-work concern of Bridgeport, Connecticut, needed a quantity of spruce lumber, of a kind then very scarce. They received a tip that a desirable cargo was about to land in Boston. How could they get to it before it was sold? . . A long distance call got the lumber just in time and it was shipped immediately—200,000 feet; value, $12,000.

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PAPER TRADE JOURNAL

With Which Is Combined

Vol. LXXXIII, No. 9 [redacted] Thursday, August 26, 1926

The Magazine of the Paper Industry

Bright Outlook for Canadian News Print Mills

Absorption of Increased Production Has Proved Better Than Anticipated, and Actual Shortage May Result Later in Year—More Rumors of Mergers of News Print Interests—Kipawa Mill Producing Half of Wood Pulp Used For Rayon in World—Scott Paper Co. Plans to Build Combined Pulp and Paper Plant in Nova Scotia

MONTREAL, Que., August 23, 1926.—The shares of pulp and paper companies have given a demonstration on the Montreal Stock Exchange during the past week such as has not been seen for many a day, there having been a great outburst of trading in them at soaring prices, Laurentide, for instance, advancing in a single day as much as 6¼ points. These securities, although representing the greater individual manufacturing industry in Canada, have hung fire for several years owing to readjustments going on in the industry. A year ago most people were decidedly pessimistic over the outlook. Over production of news print was feared this year owing to the large volume of new tonnage coming in. As a result a reduction of $5 a ton was precipitated. The market for news print, however, has not only taken up all the slack created by the new tonnage, but has not shown the usual midsummer lull, having kept Canadian mills working at 99 per cent of capacity in July, and if the usual stimulation comes into the market this fall, an actual shortage may result.

The activity in the paper stocks has quite naturally revived the rumors as to pending mergers of news print companies. It is said, for instance that further discussions have taken place this week looking to the inclusion of the Laurentide Company in a merger. From one source it is stated that a cash payment of $100 per share to Laurentide holders has been suggested, as well as a distribution among the Laurentide shareholders of a considerable proportion of the company's holdings of the Laurentide Power Company, Limited, which amount to 72,000 shares with a present market value of $7,920,000. Distributed among the 288,000 shareholders of the Laurentide Company, this would give them a further benefit of about $27 a share, supposing that the whole block were handed over.

Quebec's Huge Power Conservation

From the annual report of the Quebec Stream Commission, issued this week, it is learned that further large projects in water conservation, mainly for the benefit of pulp and paper industries are likely to be carried out in the near future. These include the regulation of the Gatineau River at Lake Daskatong, so as to help the power development now in progress by the International Paper Company. In view of the lack of power on the south shore, as compared to the large quantity available on the North Shore of the St. Lawrence, the commission is studying the opportunity of regulating the waters of the Riviere du Loup (Fraserville.) The same will be done for the Megiscane River and the Batiscan River. At the request of the Hon. Mr. Mercier, minister of lands and forests, the commission has instructed its engineers to make a survey of the hydraulic development possibilities in the mining district of Rouyn and the upper Ottawa.

The commission engineers are inclined to believe that a reservoir could be constructed at Lake Tremblant more economically than at Lake Nominingue, as at first projected, which would regulate the waters of the Rouge River. The project of establishing a reservoir at Makanac, twenty-five miles north of Grand Mere, is practically decided upon, judging by the report.

As to the operations of the Commission, these have been especially extensive on twelve of the principal rivers of the province. On the St. Maurice the flow of the river has been maintained at 16,500 cubic feet per second at Shawinigan. Due to the work which has been executed at La Gabelle, the revenue from the St. Maurice Power Company will reach this year over $32,000. In the course of the fiscal year ending June, 1925, the Commission, from that source, obtained $217,351.21, making a grand total from that source of $1,532,418.84.

From the St. Francis River frontier the Commission has collected $20,147.91 in the fiscal year ending June, 1925, and since the 1st of June, 1925, the Southern Canada Power has to pay an annual contribution of $14,716.67 for its Hemming Falls development. Ten per cent of the amount expended for the regulation of the Ste. Anne de Beaupre River, that is $34,397.40, has been collected by the commission from industries benefitting from the work done at that point.

The cost of constructing the reservoir at Lake Metis has been $113,000, but good profits are expected from that source also. In June, 1925, the Lake Kenogami reservoir reached point 114.90, and the flow of the water has been maintained in such condition as to allow operation of the mills during the whole year. In the past mills at Kenogami had to stop operating on account of the lack of water. The expenditures have reached a total of $9,113,513.39 since the creation of the commission, while the revenues have been $2,007,870.08. For the fiscal year 1924-25, the expenditures were $2,044,371.30, covering a very active period of work completed, compared with $311,896.52 in receipts. This shows that the income from the works executed by the commission was nearly twenty-five per cent per annum of the capital invested.

Pulp for Rayon

An indication of the change which has come over the production of chemical pulp is recent years is given by the announcement that the Kipawa mill of the International Paper Company at Temiskaming, Que., is now devoted entirely to the produc-

(*Continued on page 40*)

Philadelphia Paper Trade in Healthy Condition

Advance in Prices Predicted for the Autumn, Due to Restricted Production During Summer Months—Fine Papers Enjoy Normal Summer Distribution—Demand for Hot Weather Specialties Still Feature of Coarse Paper Market—Mazer Buys Garrett Mill

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., August 23, 1926.—There were many evidences of the healthier condition of the general paper market in the last few days and the firmer basis upon which the trade may build for the coming Fall season. Dealers have become convinced of the brighter outlook which is expected with the closing summer days due to the present factors that enter into the paper situation with regard to prices and inquiries now being made for future deliveries. While actual orders are not as numerous as could be desired, they are fairly well maintained in view of the absence from the city of heads of firms and associates now intent upon vacationing. Travelers to the city from well known manufacturers of popular grades of coarse and fine paper report that there is a likelihood of an advance of prices in the Fall, due to restricted production in the summer months. A few announcements already have been made of proposed advances to be effective in September.

Fine Papers Seasonally Distributed

Fine paper have been holding to normal summer distribution with demand confined to needs of the moment, except where contracts have been obtained on long-term deliveries of mill shipments. Coated papers, book papers and news print are the grades that are being sought for long term contracts extending to January 1. Other grades are not in demand, except where depleted stocks are to be replenished, and then only for immediate consumption. Announcement stocks and greeting card specialties have been moving in fair volume in anticipation of coming holiday orders and the opening of the social season. Advertising specialties, too, have been more active among the houses catering to the direct-by-mail printing and advertising firms now preparing for fall campaigns on all grades of merchandise.

Coarse Papers Quieter

The past week was notably quieter for coarse paper distributors. Demand centered chiefly in specialties for hot weather or for fancy wrapping and like grades consumed in the mercantile industries. Dealers are anticipating a rise in the price of kraft and have already been notified of restricted manufacturing policies among the mills because of advance orders on hand to consume all production for the next month or longer. This is particularly true of the Southern kraft mills, where notification was forthcoming in the early days of August of the proposed withdrawal of quotations because of heavy demands for autumn deliveries. The local dealers offering kraft and sulphite manilas a few days ago are still making shipments at prices below mill quotations. They are reported to have been fairly well cleaned out of hold overs and surplus stocks.

Bag Prices to Rise

Notification has been given to the Philadelphia distributors of the proposed plans of the Union Bag and Paper Corporation to effect a 5 per cent rise in the price of bags September 1. This rise follows a similar percentage of advance in the price of these products made in late July. In announcing the proposed advanced quotations, the Union Bag and Paper Corporation states this change will be effective in the prices of grocers bags, but that orders received between now and September 1 will be taken on the same basis as scheduled in the July quotations, provided they do not exceed the customer's customary requirements averaged over a period of thirty days.

Garrett Mill Sold at Public Sale

Under the rulings of the Trustees in the Bankruptcy proceedings instituted against the E. T. Barrett Paper Company, owners of the paper mill located in Upper Darby, Delaware County, the paper plant and all holdings of the company pertaining to the mills were disposed of by public sale under the direction of Samuel T. Freeman & Company, of Philadelphia, auctioneers, on August 17. The successful purchases was A. A. Mazer, president of the Moore and Thompson Paper Company, Bellows Falls, Vt., also president of the Hudson Bag Company, Long Island City, and the father of the boys who have the converting plant at Bush Terminal, known as the Wallabout Paper Company. They convert tissue paper into toilet paper rolls. Mr. Mazer is buying this mill for them to move their machinery and their converting plant into, so that they can make their own paper and convert it. He paid $28,000 for the mill, paper machines and all other equipment.

Association Extends Sympathy

A special session of the Philadelphia Paper Trade Association was called last Tuesday for the purpose of extending sympathy to the family and associates of James McNutt, whose death took place last Sunday. A resolution was adopted and a special committee appointed to represent the Association at the funeral services and to extend to the bereaved family the regrets of the paper men and the sympathy of his associates enrolled in the membership of the local organization. The committee appointed to represent the Paper Trade Association, who attended the funeral services at the home were President David Lindsey, Jr., of the local Association and of the Lindsay Paper Company, and Clyde B. Cobaugh, of the Satterthwaite-Cobaugh Company.

Mill Men Attend James McNutt Funeral Services

Representing the New England Mills identified with the Raymond and McNutt Company in the local distribution field, trade associates journeyed to this city last Thursday to participate in the funeral services of the deceased member of the firm whose passing took place last Sunday. Those who came to Philadelphia from the New England manufacturing trade were Superintendent Maglathlin, of the Strathmore Paper Company, and Fred Main, representing the Worthy Paper Company, both with mills in Mittineague, Mass. Another trade associate of the Raymond and McNutt Company who attended the obsequies was Murray Schlosser, of the M. and F. Schlosser Company, New York.

Paper Stock Destroyed

More than $2000 worth of paper stock was destroyed when the warehouse of Ephrem Perez, dealer in these raw products for the trade, 815 N. Mervine street, was subjected to partial damages in a fire that originated in a paper truck which became aflame while being filled with gasoline. Through the effort of the fire department the flames were confined to that portion of the warehouse where the loading for shipment was being carried out.

Pennsylvania Salt Co. Receives Kryolite Cargo

The first cargo of kryolite for the season of 1926 arrived in this city last week from Ivigtut, Greenland, on the Norwegian Steamer *Thyra*, for the Pennsylvania Salt Company. The arrival of kryolite is purely a summer and early fall operation as the vessels have to await the disappearance of ice from the shores of Greenland before being able to enter the little port of Ivigtut and leave again. In past years the number of voyages has been confined to three, and fast work is required to get these in while the water is open, ships usually arriving at Philadelphia on the first trip durng the early part of July. Owing to the lateness of the opening of the season this year, two steamers have been chartered

and two voyages each will be made before the closing of the season during the latter part of September or early October, making four cargoes for Philadelphia delivery, as compared with the previous three. Kryolite is used in the manufacture of chemicals used by the paper making industry, and produced in the plant of the Pennsylvania Salt Company.

Edwin Garrett & Son in New Mills

The newly opened mills of Edwin Garrett & Son, at Morgan, Pa., are now in full operation producing a line of anti tarnish rope tissues. The mills, after remodeling and reconstruction were recently equipped with a tissue machine. The proprietors of the new plant are Edwin Garrett and his son Elwood Garrett, the former having for many years operated the Granogue Mill at Granogue, Del., recently purchased by Herbert W. Mason, now the owner of the Curtis and Brother Mills, of Newark, Del., and formerly vice-president of the Dill and Collins Company. Edwin Garrett is also proprietor of the Garrett Paper Company, of Chester, Pa.

New Ad Counsellor for D. L. Ward Co.

With the mid-September days there will be added to the staff of the D. L. Ward Company a special advertising counsellor who will devote his time to the Graphic Arts Division of the fine paper house. The new advertising counsellor is Charles R. Weir, of Boston, Mass. Mr. Weir is president of the Direct Mail Advertising Association, and formerly was assistant vice-president of the National Shawmut Bank, of Boston. Prior to joining the Shawmut Bank he was vice-president in charge of sales, of the De Long Company, of Philadelphia, and chief correspondent of the Larkin Company, of Buffalo, N. Y.

Safety Banding for Paper Packing

Having perfected a new special type of banding devoted to the packing and shipping of paper goods, the Consolidated Steel Strapping Company, of Chicago, has been successfully introducing the flat metal wire steel band to the local trade through its Philadelphia branch, under Manager G. W. Numbers. The new banding is known as the Signode Steel Strapping, and is used in conjunction with the Signode Tool Hand Stretcher for reinforcing and strengthing so as to prevent the breaking or bursting of corrugated containers or other paper packages in transportation. The use of the stretcher and the flat steel wire banding eliminates the need of silicate in the production of cartons or corrugated containers.

Motorizing W. C. Hamilton & Sons Mills

All the units in the plant of the W. C. Hamilton and Sons Company, at Miquon, near Philadelphia, have been equipped with individual motors and brought up to date within recent weeks. With the motorizing of the remaining units in the mechanical equipment which were not included in those equipped with General Electric Motors last year, the entire machinery is now entirely operated by electrical power. There recently was reported the addition of a new line of announcement stocks in white and six colors, the first of these deckle edge styles to have been produced in the Hamilton Mills. They are in the Italian pressed stocks, carried in single and double thickness, and are adapted for high class printing and engraving papers.

Paterson Parchment Paper Co. at Sesqui

One of the most attractive booths opened during the week at the Sesqui-Centennial Exposition in the Palace of Liberal Arts, was that of the Paterson Parchment Paper Company, of Passaic, N. J., for the exploitation of its vegetable parchment papers. The exhibit is made in artistic surroundings in the form of a booth modeled along colonial lines in a pergola effect, and adorned with floral decorations and comfortable rest accommodations for trade associates and the public. In the center of the booth is erected an arcade flanked by columns in which reposes a mammoth reproduction of hand illuminated parchment book size 7 by 8 feet, containing the history of paper making from the earliest use of papyrus by the Egyptians 2000 years before Christ, and extending down through the ages with the invention of paper making processes by the Chinese and its progress, to the present day methods of manufacture. The leaves of the mammoth book are hand-printed in the style of the Middle Ages on a background of the Paterson Parchment's Company's product of Special Art Parchment. The manufacturers representative, Advertising Manager A. H. Verrinder, in charge of the booth, is distributing samples of these Special Art Parchments to the public in an artistic booklet of the various grades made by the firm. In the cool pergola a demonstration of the water proof and moisture resisting qualities of the Paterson Parchments are displayed by actual tests in a globe of water containing various grades of the parchments used for commercial purposes, such as meat packing, vegetable covers, milk can gaskets, butter wrapping, cooking, sanitary dish covers and numerous other uses. A facsimile of the Declaration of Independence on Paterson Parchment is being distributed as a souvenir of the occasion.

Government Exhibits Siamese Paper Making Process

An exhibition made under the direction of the Bureau of Standards and shown in the National Government Exhibit at the Sesqui-Centennial, in the Transportation Building, shows how the United States was called on to aid in the development of paper making in Siam. As outlined in the exhibit, an explanation of the Government's part in the development of Siamese paper making from raw materials available in that country gave an account of the tests made in behalf of the government of that country. The study made by the United States Government Bureau of Standards was from tests of fibrous raw materials growing in Siam with a view of demonstrating their value for paper making. These materials were Bagasse, Banana Tree, Lalang Grass and Rice Straw. After experimentation, it was found by the Bureau of Standards that a very good grade of paper could be produced from the raw products submitted. The United States not only developed the paper making process for the Siamese but also designed a paper mill for our friends across the seas which is now being successfully operated.

S. L. Willson Looks for Active Fall

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., August 23, 1926.—President S. L. Willson of the American Writing Paper Company who returned to his desk Monday morning after a several weeks' trip through the middle West in the interests of the company, looks for an intense business revival in the paper manufacturing industry during the coming few months. The local organization expects to get its full share of the better business.

Reorganization plans are moving along satisfactorily but after October 6 when the final adjudication by the courts is looked for a new era will dawn, he expects, for the company. During his receivership the plan was to weed out all that is undesirable in the way of excess mills and machinery, and centralize the manufacturing in Holyoke. He was well satisfied with the personnel and he expected no changes at present.

Business has suffered its usual seasonal depression in the West but not sufficiently to cause any alarm. Low water in the river is also seasonal and with the coming of the fall rains, soon due, this will be done away with. The development of the steam generating plants of the Holyoke Water Power Company has also been a boon to the manufacturers.

Hammermill Agents to Meet

ERIE, Pa., August 16, 1926.—The fifteenth annual conference of the agents of the Hammermill Paper Company will be held in Erie, August 26-27. Elaborate plans are being made as usual to make the meetings a big success in every respect. Among other unique features this year will be the first showing of the Hammermill motion picture at the Perry Theatre, at 9 o'clock, Wednesday evening, August 25.

To Hold Safety Conference at Appleton

Meeting Will Be Sponsored by the American Pulp and Paper Mill Superintendents Association and the Paper and Pulp Mill Section of the National Safety Council — To Issue $3,000,000 Bonds For Huge Hydro-Electric Development

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., August 23, 1926.—Paper manufacturers of Appleton and vicinity will be hosts to the second annual Fox River Valley Safety Conference at Appleton Wednesday, September 29. An attendance of about 2,000 factory owners and executives will be present, according to W. F. Ashe of Kaukauna, Wis., conference chairman. Mr. Ashe is employment and welfare superintendent of the Thilmany Pulp and Paper Company. The conference is sponsored in part by the American Pulp and Paper Mill Superintendents Association, the Paper and Pulp section of the National Safety Council and others.

Sessions will be held all day and evening to take up safety subjects and the Wisconsin Industrial Commission will furnish several speakers. J. Leslie Sensenbrenner of the Kimberly-Clark Company, Neenah, Wis., is to preside at the afternoon session, and Elmer H. Jennings of the Thilmany Pulp and Paper Company, Kaukauna, Wis., will preside in the evening. The safety movement in the Fox River Valley was originated largely by the paper manufacturers and has since become an objective in many other lines of industry.

Wisconsin Ranks Fourth

Some interesting facts about the paper industry in Wisconsin were presented in an address given by R. M. Radsch, superintendent of Thilmany Pulp and Paper Company, Kaukauna, Wis., before the Lions Club of Appleton, Wis., last week. He stated that Wisconsin now ranks fourth in papermaking, produced $90,000,000 worth of paper products annually, and pays wages of $25,000,000 to 18,000 papermill employees annually.

Dismantling Old Boiler House

Dismantling of the old boiler house at the main mill of the Consolidated Water Power and Paper Company at Wisconsin Rapids, Wis., has been completed and construction of a new boiler house is under way. It will be of brick, concrete and steel. The company plans to install eight new boilers of the latest type as soon as the structure is completed. This is part of the plan the mill has of gradually replacing all of the machinery which has been in operation for so many years. The old boiler house will house power equipment.

Financing New Power Development

Financing of the huge hydro-electric development of the Northern Electric Company, subsidiary of the Northern Paper Mills, Green Bay, Wis., will be accomplished in part through a bond issue of $3,000,000. The bonds have been sold to Halsey Stuart & Co., the Minnesota Loan and Trust Company and the Second Ward Securities Company, and will be offered to the investing public at once. All of the issue consists of three year 6 per cent bonds.

Only one of the power plants contemplated at Chalk Hill and White Rapids on the Menominee river will be used by the Northern Paper Mills. The plants will be near Amberg, Wis. The other will supply power to the Milwaukee Electric Railway and Light Company, a subsidiary of the North American Company. The Northern Electric Company already controls 70 miles of steel tower line from Green Bay to Amberg and half of it is under lease to the Milwaukee company for its 132,000 volt transmission line from Milwaukee to Iron Mountain. The lease is in the name of the Wisconsin Gas and Electric Company, also a part of the North American system, and the contract is for the entire output of one of the hydro-electric plants. The construction work on the two dams is progressing well and they are scheduled to be completed by April 22, 1927. A total of 23,000 electrical horsepower will be controlled by the Northern Electric Company through this project.

Officers of the Northern Electric Company are the same as those of the Northern Paper Mills. They are: Judson G. Rosebush, Appleton, Wis., president; Earle Murray, Green Bay, Wis., vice president; A. R. Burton, Green Bay, secretary; W. P. Wagner, Green Bay, treasurer. Additional directors are C. A. Goodman, Marinette, Wis., F. J. Harwood and G. E. Buchanan, Appleton, Wis., and Louis Schriber, Oshkosh, Wis.

Constructing Little Kaukauna Dam

Construction of the Little Kaukauna government dam at Little Rapids, another papermill supply source, will be ended in about a month and the structure completed, according to announcement of A. F. Everett, United States engineer. A crew of 60 men has been kept busy there.

The new dam is to be one of the most modern on the Fox river. It is constructed entirely of concrete and steel and is 587.7 feet in length, spanning the entire river. There are eight gates so as to give ample flowage during high water periods. Allowance has been made for a six foot navigation level.

Low Water in Fox River

Low water characteristic of the midsummer season has forced a few paper mills in the Fox river valley to shut down and others to curtail production for the time being. The water is not any lower than in other years and it is believed that a few good rains will restore normal conditions. A low water condition also exists on the Wisconsin river, causing plants to reduce the extent of operation temporarily.

Deepening Fox River

All work on the turning basis and deepened channel of the Fox river in the paper mill district at Green Bay, Wis., will be completed by the middle of September. About 60 per cent of the task is done now. The improvement will enable large boats to dock at the American Writing Paper Company's plant at DePere, Wis., and the Fort Howard Paper Company at Green Bay.

Increase Sales of Sandpaper

Sales of sandpaper have been doubled within two years by the Wausau Abrasives Company, Wausau, Wis., through a change in the method of selling the product, according to P. W. Sawyer, president of the company. Attractive metal display cases were adopted by the company and placed in 21,000 stores all over the country. The sandpaper is wrapped in neat packages under the trade-mark "Ruff Stuff" and is shown in these cases. Sales have mounted continually since this sales policy was adopted. The company was started in 1898 and is the only one in Wisconsin making sandpaper.

Pulp Arrives at Ashland

Nine hundred tons of pulp have arrived at Ashland, Wis., from Nipigon Bay recently and this material is being shipped to paper mills of the Fox and Wisconsin river valleys. Three rafts of pulpwood, one of them the largest ever handled, have been towed across Lake Superior from Canada to Ashland for the Nipigon Corporation this summer. Loading crews at Ashland have been working night and day to keep the wood moving via freight to Appleton, Stevens Point, Wisconsin Rapids and other points, largely for mills of the Consolidated Water Power and Paper Company.

New dock conveyors installed at Ashland recently have helped to accomplish quick movement of the wood. The conveyor system consists of three 100-foot sections and two 80-foot sections, each driven by a 5 horsepower motor. The conveyors are of the slat type. A siding on each side of the conveyor is capable of holding 13 cars. Thus one string of cars can be moved out while those on the other side are being loaded.

Appleton Coated Paper Co. Increases Stock

The Appleton Coated Paper Company, Appleton, Wis., has amended its articles of incorporation increasing its capital stock from $600,000 to $1,250,000. The amendment states that the increase was made "to provide for buying, selling and owning real estate, mortgages, bonds or stocks in other corporations." The amendment was signed by Charles S. Boyd, president, and F. C. Heinritz, secretary, of the company.

Inspect Island Paper Co. Plant

Announcement probably will be forthcoming soon as to whether the new corporation known as the Valley Paper Mills, Neenah, Wis., will buy the defunct mill of the Island Paper Company at Menasha, Wis. More than 100 stockholders of the Valley company inspected the plant a week ago so they could reach a decision at a meeting which will be called shortly.

Installs Automatic Sprinklers

Automatic sprinklers for fire protection are to be installed at the Little Rapids Pulp and Paper Company's mill at Little Rapids, Wis. The contract has been awarded to Louis C. Phillips of Appleton, Wis.

To Erect Elevated Water Tank

Added fire protection at the Consolidated Water Power and Paper Company's mill at Biron, Wis., will be afforded through construction of a new elevated water tank with a capacity of 50,000 gallons. It will be of the hemispherical type, 20 feet in diameter and supported by a structural tower 136 feet above the ground. This tank will replace a wooden one in use for many years.

Studying Stream Pollution

Wisconsin river pollution conditions will be investigated by the Wisconsin Conservation Commission as well as those of the Fox river. Prof. C. L. Turner, zoologist of Beloit college, has completed his principal work on the Fox river at Green Bay and has moved the scene of his operations to the Wisconsin river. Fish cages have been placed at numerous points along the Fox to determine the stages of pollution in the river. Prof. Turner is trying to learn whether fish will live above the paper mill area and whether they are poisoned when in water below the mill section. These cages also will be placed on the Wisconsin.

Safety Competition

Mills of the Consolidated Water Power and Paper Company are finding rather stiff competition from the Interlake mill at Appleton, Wis., in the safety contest now in progress. The Interlake employees made a record of 100 per cent during July as to safety. They are running up on the Stevens Point mill, which has closed its fifth month without a lost-time injury, and on Ashland, which also had a record of 100 per cent for July.

American Paper Co. Incorporates

Articles of incorporation have been filed by the American Paper Company, Milwaukee, Wis. The company will "deal in and manufacture timber and deal in and manufacture paper." There are 100 shares of common stock at $100 each and 250 shares of preferred stock at $100 each.

Joins Staff of Arthur D. Little, Inc.

BOSTON, Mass., August 23, 1926.—Frederick S. Bacon, formerly president of the Puritan Dye and Chemical Company, has joined the organization of Arthur D. Little, Inc., chemists, engineers and managers, of Cambridge, Mass.

Cost Convention at Holyoke Sept. 23-25

The next Cost Convention will be held at the Nonotuck Hotel, Holyoke, Mass., on Thursday, Friday and Saturday, September 23, 24 and 25. As this is the week during which the Eastern States Exhibition will be held, it is very necessary that early reservations should be made. These should be addressed to S. P. Dawson, Manager, Hotel Nonotuck, Holyoke, Mass., and should state that the writer will attend the convention, to be held by the Cost Association of the Paper Industry, on the above mentioned dates.

A most interesting program has been drawn up. In view of the large savings that have been effected in many mills, by the "Re-use of White Water," one of the sessions is to be devoted to this topic. An engineer, an expert in the installation of save-alls, will attend, and be ready to answer all questions relating to this important subject after reading a short paper on the principles involved. He will also cite specific instances, showing where the cost of the equipment has been paid for, in less than six months.

Another paper will be on "Standard Costs," by a cost accountant connected with a large mill, which is operating a system by which it does not cost each grade or lot, but costs them by standards, which have been set up and which are compared with the "actual costs." Many inquiries have been received on this subject, and it is believed that it will prove a most interesting session.

Another paper will be read by Dr. Hugh P. Baker, Executive Secretary of the American Paper and Pulp Association, on the subject of "New Developments in the Use of Wood."

In view of the interest displayed in the paper read at a previous convention, by M. C. Dobrow, assistant secretary of the Writing, Cover and Tissue Paper Manufacturers Association, on "Machine Capacity in the Industry," arrangements have been made with Mr. Dobrow, to give another talk on this subject, which will bring up-to-date, data showing the present machine capacity in the different groups in the industry.

"Accounting Procedure for Standard Costs," will be the topic discussed by the representative of a well-known accounting firm. This speaker has had a great deal of experience along these lines, and is an excellent talker. The session at which he speaks, will be extremely interesting.

A banquet will be held on the night of Thursday, September 23, when it is hoped that a number of the executives from the local mills will attend.

Write direct to the secretary-treasurer of the Cost Association of the Paper Industry regarding any particular topic you may wish to have discussed at this forthcoming Convention. Many accountants in the past have considered that they have received valuable suggestions at these conventions, so they are asked to contribute their share toward helping to make this one a big success, by co-operating in supplying information and suggestions.

The importance of the accountants in the industry is now more generally recognized than it was some years ago, and if we all co-operate undoubtedly the value of the work done by trained accountants to the executives of the industry will be emphasized.

Finland Paper Exports Show Decrease

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., August 25, 1926.—Exports of pulp and paper from Finland during the first five months of the current year were considerably under those of the corresponding period in 1925, according to a report from Consul J. F. McGurk, Helsingfors, who states that this reduction is ascribed in part to the adverse business conditions in Great Britain. Shipments up to the end of May comprised 85,151 metric tons (metric ton, 2,205 pounds) of paper, 92,763 tons of sulphite pulp, 27,222 tons of sulphate pulp, 11,772 tons of mechanical groundwood, and 16,779 tons of carboard.

Toronto Paper Demand Ahead of Last Year

Trade During June and July Was Better Than Expected and a Considerable Improvement Is Looked for During the Last Two Weeks of August—R. A. McInnis to Be Superintendent of the New Plant of the Anglo-Canadian Pulp & Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., August 23, 1926.—Although somewhat spotty in character, the volume of trade done by the various jobbing houses during the summer months has on the whole been ahead of last year. June and July were better than many expected and August will, it is hoped, measure up larger than has been indicated during the first two or three weeks. The holiday season is now about over and the warehouses are stocking up, in anticipation of active fall requirements, engendered by the good results of the harvest and gradually improving trade conditions in general.

The paper bag business has been in a rather chaotic state for some time largely through lack of organization and the consequent prevalence of price cutting. The bigger manufacturers of paper bags are in a fairly good position and are not feeling the competition so much, but the small producers and distributors are not in such a fortunate condition. There is considerable slashing going on and, while there is a fair demand, the situation as a whole is not considered satisfactory.

Jobbers in all lines of paper report that the prospects for trade during the first two weeks in September, when the Canadian National Exhibition will be in progress, are very good. Buyers in some instances are holding off until that date when they will come to Toronto in large numbers and be entertained by the merchants, and the latter generally have a number of special lines which they present.

New Position for Mr. McInnis

The new superintendent of the big mills, which will be erected by the Anglo-Canadian Pulp and Paper Co., Quebec City, will be R. A. McInnis, who has been mill manager of the Abitibi Power and Paper Company at Iroquois Falls, Ont. Mr. McInnis has been manager at the Falls for the past nine years which town he has done much to develop, being a public spirited and well thought of official. He carries with him to his new post the best wishes of every employe of the Abitibi Company. He is succeeded at Iroquois Falls by J. E. Patterson, who has been with the Abitibi Company for several years and whose promotion is well deserved.

Good Progress at Fort William

Rapid progress is being made on the extensions to the plant of the Fort William Paper Company at Fort William, Ont. George H. Mead, chairman of the Board, W. N. Hurlbut, president of the company, and other directors, paid a visit to the mill during the past week. Mr. Mead said that it was planned to proceed next year with the enlargement of the mill instead of 1928 as set out in the agreement with the city. He added that indications pointed to a rapid advancement of the industry in Ontario and that the site and facilities of the plant were capable of almost illimitable expansion. The erection of the million dollar sulphite mill is well under way. A permit was issued recently for a three hundred thousand dollar building but the costliest part of the new undertaking will be the mechanical equipment.

Spanish River Bonds

One of the component companies of the Spanish River Pulp and Paper Mills is the Ontario Pulp and Paper Company, with its plant at Sturgeon Falls, Ont. The latter is undertaking a big sinking fund operation in connection with its outstanding, first mortgage, sinking fund, gold, six per cent bonds, due December 1, 1931. The company has called for payment $64,000 par value of these bonds, which will be redeemed on January 1, 1927. The bonds are, however, being taken in at the call price of 110 and interest, so that the actual money involved in the retirement will be $70,400, plus interest whatever that may be. Three separate denominations of the bonds have been drawn for redemption and interest on these bonds will cease as from January next.

Great Pulpwood Exhibit

In the new Ontario government building at the Canadian National Exhibition, Toronto, which is now being completed, there will be a large section devoted to forestry and pulpwood. The great natural wealth of the province will be abundantly represented, under the direction of E. J. Zavitz, who is deputy minister of forestry for Ontario. The work of fire prevention and conservation will also be pictured and the process of making paper demonstrated by natural exhibits from the spruce wood to the finished article.

New Industry for Peterboro

There is being established in Peterboro, Ont, a new industry by the Seabright Company, Fulton, N. Y., manufacturers of liquid tight paper cans and bottle caps. The concern is taking over part of the plant of the Nashua Paper Company in that city. R. A. Brown, manager of the latter organization, induced the new industry to locate in Canada and he will be secretary-treasurer of the concern. While officers of the Nashua Paper Company will be in charge of the management and sales of the Seabright Company, the affairs of the two concerns will be handled separately.

Notes and Jottings of the Industry

Victor Kinsman, of the Spruce Falls Power and Paper Company, Toronto, spent a few days at the plant at Kapuskasing, Ont., and reports that good progress is being made with the large construction work going on there.

Miss Ellen Herb, daughter of J. J. Herb, head of the Westminster Paper Mills, New Westminster, B. C., is visiting at the home of T. A. Weldon, Thorold, Ont.

N. E. Wainwright, of the sales staff of the Provincial Paper Mills, Toronto, who recently underwent an operation in the hospital, is now at his own home and improving rapidly.

Good progress is reported on the new mill of the Superior Paper Mills at Thorold on the location of the old Peerless Pulp and Paper Company, the walls and roof being completed. It is expected that the industry will begin turning out light weight papers early in the new year.

The Abitibi Research Corporation, of Iroquois Falls, Ont., was formed recently with an authorized capital of ten thousand dollars to conduct research work in connection with reforestation and pulp wood growing.

The Interlake Tissue Mills Company, Merritton, are making arrangements for an elaborate exhibit of their various lines of papers, including crepe novelties, at the forthcoming Canadian National Exhibition, Toronto.

W. Mountstephen, who has many friends in the paper trade, has taken an important position in Peterboro. He was for many years with Monotype, Limited, Toronto, and of late has been residing in Los Angeles, Cal.

I. H. Weldon, president of the Provincial Paper Mills, Toronto, and Mrs. Weldon, who have been several weeks touring the British Isles, have returned home. While abroad, Mr. Weldon paid a visit to the plant of Charles Walmsley & Co., Bury, Eng., which firm is building the new paper machine which will be installed in the Port Arthur division of the Provincial Paper Co. and will be ready for delivery in the next few months.

BIRD MACHINERY

60%

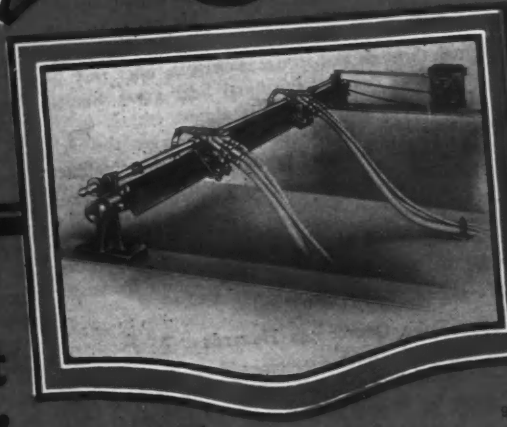
Repeat Orders

Of the more than three hundred Vickery Felt Conditioners operating in this country sixty per cent were purchased as the result of the performance of one or more Conditioners already installed?

Could anything we say be stronger?

Write for new Bulletin.

BIRD MACHINE COMPANY
South Walpole, Mass.



The Vickery Felt Conditioner

Paper Tubes for Shooting Oil Wells

Among the many unusual uses which have been developed for paper products, a recent introduction into the oil industry may be cited as novel and interesting. This consists of the substituting of paper tubes for those of tin as containers for nitroglycerine which is employed for "shooting" oil wells in most parts of the world.

The introduction signalizes the first advance registered in this particular piece of equipment since the science of oil well shooting was developed. The containers or tubes in use throughout the world have been of tin and there has been practically no change in them in 20 years.

Disadvantages of Tin Shells

The disadvantages of tin sheels, as they are known to the oil industry, have been known and freely admitted and their danger has been emphasized from time to time by accidents which resulted in loss of lives and property. But, though the matter was given attention at various times, efforts to produce a shell which retained the good qualities of tin and eliminated its faults were unavailing until recently.

The subterranean sandstone formations which yield oil are commonly fine-grained and the flow of the oil to the bottom of the bore is slow. In most fields it is common practice to explode a quantity of nitroglycerine at the bottom of the hole to break up the sandstone and facilitate the passage of the oil. After a well has flowed for a time the channels in the sandstone tend to clog from the paraffin within the petroleum and it is necessary to detonate subsequent blasts from time to time. The frequency with which this is done depends upon local conditions, but in some fields wells are shot on an average of once a month.

Standard Container Holds 20 Quarts

Local conditions also determine the amount of explosive to be used. The quantity varies from 20 quarts to 400 quarts of nitroglycerine. As a standard shell or container holds 20 quarts, the number of shells used may be from one to 20. The size varies with the iron casing lining the well. This may be from five to 12 or even 15 inches in diameter and the shells are selected accordingly.

In practice the shells, hollow cylinders, are loaded on the surface of the ground and lowered into the well by cable. Where several shells are necessary, they are hooked together in series and all lowered at once.

Some oil wells are subject to flowing "by heads." That is, they bush at intervals. In wells of this sort, the shells containing the explosive must be lowered between "heads." This calls for fast work at times.

Upon being lowered through the iron casing at a high rate of speed, tin shells sometimes develop frictional heat great enough to cause sparks. In such instances there is almost certain to be a premature explosion. Usually this so badly damages the well as to cause its abandonment, occasioning a loss which sometimes runs as high as $100,000.

Sometimes the workman spills a drop of nitroglycerine on the side of the tube in filling it and it goes unnoticed. Frictional heat during the lowering in the well will almost certainly cause an explosion. Then, too, tin tubes are sometimes torn by snags protruding from the inside of the casing walls.

Paper Tube Overcomes Hazards

The newly developed paper tube overcomes these hazards. In their manufacture the tubes are impregnated with sulphur by immersion for a period of hours. The lower end is closed with a casting made from a patented mixture of sulphur and graphite. At the top a casting of similar material is made in funnel form, leaving an opening for filling. This opening is commonly plugged with mud before the shell is lowered.

When such a shell is lowered, the friction which develops softens its wall at the outside through melting of the sulphur. As sulphur melts below the firing point of the nitroglycerine, there is no danger of an explosion. As the walls of the paper tubes are thicker than those of the tin containers, the danger of penetration of the walls by snagging is less.

The new shell thus does much to decrease the danger incident to oil-well shooting. In addition, it possesses a big advantage from the practical standpoint.

As tin is indestructable by explosion, the shreds which result are blown upward into the well. There, mixed with shale fragments, they tend to clog or "bridge" the well. These bridges are a bugbear of the oil operator as the free flow of a well immediately after a shot is essential if it is to properly clean itself.

Less Likely To Cause Explosion

While the paper shells are more elastic than those of tin and thus less likely to promote an explosion through shock, they are at the same time brittle. The explosion shatters them into bits. The sulphur makes them inflammable and they are for the most part entirely consumed.

The fragments which remain are heavier than either oil or water and fall back to the bottom of the hole. There is thus no danger of them rising later and causing trouble in the pipes or collecting system, which has been a defect of other non-metallic shells which have been tried out.

Being composed entirely of chemically inert materials, there is no danger of the paper shells being affected by corrosive liquids in the wells or by the nitroglycerine itself.

Impregnation of the tubes with sulphur increases their strength to a point where they will stand rougher treatment than tin containers. They are manufactured to withstand an end pull of 250 pounds and a crushing strength of 200 pounds on their side walls.

The shells are made up to 11 feet in length, depending upon their diameter.

To Control Schumacher Wall Board Corp.

[FROM OUR REGULAR CORRESPONDENT]

LOS ANGELES, Cal., August 19, 1926.—Announcement just has been made that the Paraffine Companies, Inc., manufacturers of a long line of paper products on the Pacific Coast, has acquired an interest in the Schumacher Wall Board Corporation of Los Angeles and that henceforth it will be responsible for the management of the latter concern. The Schumacher concern has been in existence for thirteen years and during that time has developed into one of the largest producing factors in the country in its particular product, which is paster wall board and allied products.

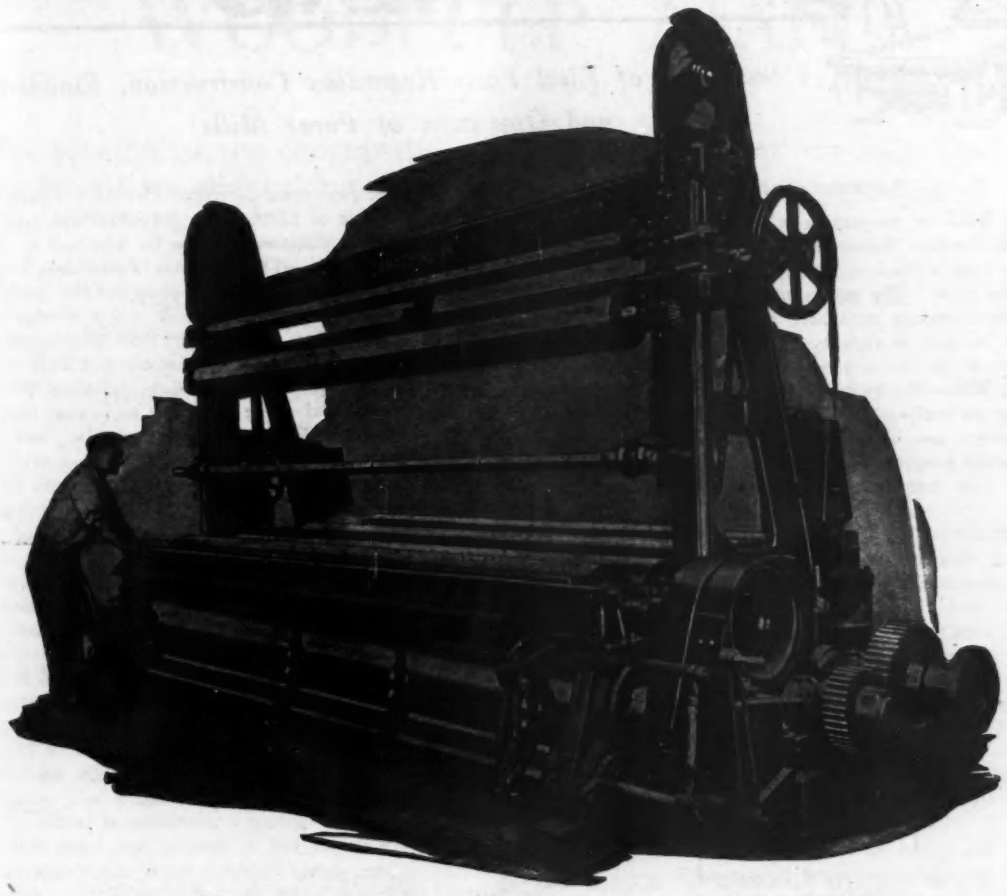
The Paraffine Companies, Inc., already make a line of roofing, building papers and the like, in addition to its line of board papers, and through its acquisition of the Schumacher concern, backed by the tremendous resources of the company with its $18,000,000 investment, it is expected that it will push the wall board concern to the front of industries connected with the building trades throughout the country.

A. R. Moylan, who for the last eleven years has been connected in an official capacity with the Paraffine Companies, Inc., will be executive vice president and general manager of the wall board company, while the board of directors will be composed of officials of the Paraffine Companies, Inc., and several men prominent in other lines of business.

Requests Samples of Sulphite Bond

T. V. Moross of Moross Paper Company, 61 Natoma Street, San Francisco, Cal., requests samples and prices on a good sulphite unwatermarked bond, white and colors, also mill bristol, white and colors, for regular stock.

News Roll Winder



New CAMACHINE 19 for News Roll Winding in Modern High Speed News Mills

Here is what Mr. J. A. F. Nevins of the Great Northern Paper Company, says about it:

GREAT NORTHERN PAPER COMPANY
Millinocket Mill
Millinocket, Maine

June 26, 1926.

JAMES A. CAMERON, Pres.,
Cameron Machine Co.,
61 Poplar St.,
Brooklyn, N. Y.

Dear Mr. Cameron:

The Cameron Winder is behaving very well. We are all very much pleased with it. The rolls that come off it are in excellent shape and very nice to look at. The writer can recommend it as the best winder ever manufactured to date and would be glad, at any time, in selling to other people, to help you by giving a letter.

With kind regards, I am,

Yours very truly,

J. F. Nevins

Superintendent.

Dic. JAFN.

CAMERON MACHINE COMPANY

Builders of Winders and Rewinders

POPLAR STREET, BROOKLYN, N. Y., U. S. A.

CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Augusta, Me.—In connection with proposed reorganization plans for the Cushnoc Paper Company, now in receivership, it is proposed to raise a fund of $500,000, for extensions and betterments at the plant. The work will include the installation of additional paper-making machinery and auxiliary equipment for considerable increase in capacity. It is purposed to develop an output of about 70 tons of news print per day.

Menasha, Wis.—The Valley Paper Mills Company is said to be arranging the early selection of an architect to prepare plans for its proposed new mill addition, and proposes to place the project in actual progress at an early date. It will be one-story, brick, steel and reinforced-concrete, estimated to cost about $65,000.

Pittsburgh, Pa.—The Republic Bank Note Company, 2817 Forbes street, manufacturer of high-grade paper specialties, has preliminary plans under way for the erection of a new four-story and basement plant on site selected at 2323-27 Forbes street, to be 90 x 142 feet, reported to cost approximately $300,000, with equipment. A portion of the structure will be given over to office service. George W. Goldsworthy is in charge.

Fort Wayne, Ind.—A. G. Burry, care of the Fort Wayne Paper Box Company, Calhoun and Superior streets, will make improvements in a two-story building at 1315 Calhoun street, to cost about $25,000. It has not been announced whether the structure will be occupied by the paper box company or by another interest.

Savannah, Ga.—John E. Helfrich, 535 East Bay street, Savannah, is at the head of a project to organize a new local company for paper box and container manufacture. It is proposed to secure a local building and install machinery at an early date. The new concern will operate with a capital of $25,000.

Aurora, Ill.—Miller, Bryant, Pierce & Co., 20 East Jackson Boulevard, manufacturer of carbon papers and kindred products, has completed plans and will soon take bids for the erection of a new addition to its plant at 189 South River street, to be three-story and basement, 60 x 80 feet, estimated to cost about $50,000, with equipment. Lockwood, Greene & Company, 400 North Michigan avenue, Chicago, Ill., are architects and engineers. F. E. Miller is president.

Hickory, N. C.—The Hickory Paper Box Company, recently organized with a capital of $100,000, is said to be arranging for the early operation of a local plant for the manufacture of paper containers of various kinds. The new company is headed by A. S. Menzies and R. E. Ballinger, both of Hickory.

Green Bay, Wis.—The Northern Electric Company, operated by the Northern Paper Mills, Green Bay, has plans for the construction of two new hydro-electric generating plants on the Menominee River, designed as the largest power development up to the present time in Northern Wisconsin and the Upper Michigan Peninsula. The two new plants will have a gross rated output of 66,000,000 kw.-hours per annum, and practically one entire unit will be used for service at the mills of the parent organization. A transmission system will be constructed. To carry out the project the Northern Electric Company is disposing of a bond issue of $3,000,000, a portion of the fund to be used for construction purposes. Judson G. Rosebush is president.

Philadelphia, Pa.—The Adelphia Paper Box Company, 149 West Columbia avenue, has filed plans for the construction of a new one-story addition at Hancock and Columbia avenues. A general contract for the structure has been awarded to John Dillon & Sons, 1804 North Front street, and work will be placed under way at once. It is reported to cost about $15,000.

Los Angeles, Cal.—The Paraffin Companies, Inc., San Francisco, manufacturer of processed papers, etc., has recently acquired a controlling interest in the Schumacher Wall Board Corporation, with plant at Los Angeles, and is said to have plans maturing for general expansion in the business, including production. The Schumacher company has arranged for a preferred stock issue of 30,000 shares, to aggregate $780,000, a portion of the fund to be used for general operations and development.

Grand Falls, N. B.—The Saint John Power Company, an interest of the International Paper Company, 100 East 42nd street, New York, will proceed with a proposed hydro-electric power development on the Saint John River, near Grand Falls, reported to cost in excess of $10,000,000, with transmission system. The project will include the construction of a dam just above Grand Falls, and from the upper basin, so created, a tunnel will be built under the town to a lower basin, where the power station will be located. The initial installation will consist of three 20,000 hp. units, to develop a maximum of 60,000 hp. The majority of the output will be used at new paper mill to be constructed in this section by the International company, and a portion of the power will be utilized by the Fraser Companies, Ltd., for similar paper mill service.

Midland, Ont.—The International Fibreboard Company is said to be planning the early rebuilding of the portion of its plant destroyed by fire, August 5, with loss reported at close to $100,000, with equipment. The reconstruction is expected to cost close to a like sum.

Temiskaming, Que.—The International Paper Company, 100 East 42nd street, New York, is developing maximum production at its Kipawa Mill for sulphite pulp, now being used in the manufacture of rayon, and proposes to maintain operations on the present basis for an indefinite period. It is said that further expansion may be carried out in the future.

New Companies

New York, N. Y.—The Seneca Folding Paper Box Company has been incorporated with a capital of 300 shares of stock, no par value, to manufacture paper boxes and containers. The incorporators are W. Sussman and R. A. Powers. The company is represented by W. O. Robertson, Waltman-Cane-Cardoz, 128 Broadway, New York.

Chicago, Ill.—The Terre Paper Box Company, 2407 West Ohio street, has been incorporated with a capital of $10,000, to manufacture and deal in paper boxes and containers. The incorporators are Jerome J. Sladkey, Robert R. Pyatt and William B.

WOODPULP MAN

On account of the constantly increasing activities of our Pulp Department we are seeking the services of a man who can fit in with the following:

Primarily he must be a business man and be able to do things on his own initiative.

He should know the requirements of mills in this country and be able to point to a successful sales record accomplished through correspondence and by personal contact with the buyers.

He should have on his finger tips the European and domestic sources of supply.

If you are not a job seeker but have been waiting for that opportunity to make a change for the better, where you can assume more responsibility with the advantages to be derived therefrom, and feel that you are the man we are looking for, we would like to hear from you.

Our ideas regarding remuneration are open. We want to pay what a man is worth to himself and to us.

If you are not so well known that your name is sufficient to tell your story, please be sure to give us your full history so that we can both save time.

In order to insure confidence address your reply to Mr. B. Gottesman, personally.

HUDSON TRADING COMPANY

270 Madison Ave.

NEW YORK

Gemmill. The company is represented by Urion, Drucker, Reich-

Philadelphia, Pa.—The Philadelphia Card & Paper Company mann & Boutell, 134 South LaSalle street, Chicago.
is being organized by local interests to operate a local plant. Application for a state charter will be made on September 13. The new company is represented by Illoway & Felix, 213-15 South Broad street, Philadelphia.

New York, N. Y.—The Ullman Straw Goods Corporation has been incorporated with a capital of $10,000, to manufacture strawboard and affiliated products. The incorporators are J. Ullman, H. Michaels and S. S. Ranson. The company is represented by H. J. Block, 1476 Broadway, New York.

Keystone Paper Co. May Locate in Cohoes

[FROM OUR REGULAR CORRESPONDENT]

COHOES, N. Y., August 23, 1926.—W. T. Winn, an official of the Keystone Paper Company, of Philadelphia, was in this city early in the week investigating the possibilities of Cohoes as the location of a proposed new mill. Mr. Winn was the principal guest at a meeting in the Elks' Club which was attended by city officials, representatives of the Municipal Industrial Commission, Chamber of Commerce, and the Cohoes Power and Light Corporation. He was introduced by Harry G. Prankard, president of the Mohawk Papermakers, Inc., and outlined briefly the company's plans regarding the new mill. Mr. Winn stated that the company had practically decided to erect a plant in New York State and he intimated that his firm was quite favorably impressed with the advantages offered for manufacturing in this city. Mr. Winn will come to Cohoes for another conference with local officials next week.

It has been known here for some time past that the Keystone Paper Company has been considering the erection of a new mill here. Mr. Prankard, of the Mohawk Papermakers, who has been instrumental in bringing several new paper making firms to this city, has been very active in seeking to induce the Philadelphia concern to locate here. The Keystone Company is a customer of the Mohawk Papermakers and one of the chief reasons for the firm's desire to locate here is the advantage of being near its source of supply, the plant of the Mohawk Papermakers.

It is said unofficially that if some definite agreement can be reached with the city officials regarding the matter of taxation and with the local power company in the matter of power, the Keystone Company will in all probability build its new mill on South Saratoga street, where are now located the plants of the Mohawk Papermakers, Inc., and James Gledhill & Son, wall paper manufacturers. It is said that prospects for Cohoes getting the Keystone plant are extremely bright.

Harry G. Prankard, head of the Mohawk Papermakers, has been mainly responsible for the establishment in this city of several large paper concerns, all of whom are customers of his firm. These include the Cohoes Envelope Corporation, started several years ago in a small way and now capitalized at $400,000, with a production of more than one million envelopes daily, James Gledhill & Son, Adirondack Pad Company, and the American Multitone Papers Corporation. All of these concerns use paper made by the Mohawk Papermakers in the Cohoes and Waterford mills.

Raymond Kelly Leaves Kimberly-Clark Co.

NEENAH, Wis., August 23, 1926.—Raymond Kelly, general sales manager of Kimberly-Clark Company and vice-president of Cellucotton Products Company, announces his resignation from both offices, effective at once.

Mr. Kelly has been associated with Kimberly-Clark Company for eleven years and for the past six and one-half years has been general sales manager. He has been vice-president of Cellucotton Products Company since the formation of that company in 1920.

Mr. Kelly has not announced his future business plans and for a short time will continue his residence in Neenah.

Litigation Holds Up Mill Improvements

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., August 23, 1926.—Improvements and power development projects to cost several million dollars, planned by pulp and paper concerns of the Upper Hudson Valley, are being held up pending the outcome of litigation now in progress between the Hudson River Regulating District Board, in charge of the Sacandaga Reservoir project, and the Fonda, Johnstown & Gloversville Railroad Company, which is seeking to block the construction of the proposed reservoir. Work on at least one of these developments, that of the Union Bag and Paper Corporation, at Bakers Falls, was to have been started this year but nothing has yet been done, it is understood, because of the possibility of long drawn out litigation.

The courts have ruled that the legislative act establishing the Hudson River Regulating District Board is constitutional and appraisers appointed by the court are now endeavoring to fix the value of the railroad company's property needed for the construction of the reservoir. The State's offer for the property was $550,000 while the railroad company demands $5,000,000. The appraisers have held several meetings but have made no decision as yet. There is a possibility that the railroad company will appeal the decision if the figures decided upon are not satisfactory, and it is this uncertainty that is largely responsible for the delay in the starting of work on power development projects planned for the Upper Hudson.

Probably the most important project of which there is definite information is that which the Union Bag and Paper Corporation, of Hudson Falls, is planning at Bakers Falls, where it is proposed to erect another dam and a large generating plant at a cost estimated between $4,000,000 and $6,000,000. It is reported that beginning of work on these plans awaits only definite assurance that the Sacandaga reservoir will become a reality. While this project will be undertaken by the Union Bag and Paper Corporation, which owns the Bakers Falls property, it is understood that the Adirondack Power and Light Company is interested to the extent that it will purchase the surplus power developed at the proposed plant.

Bakers Falls is where the first paper mill in Northern New York was established about 75 years ago by Amassa Howland. The great water power at this place was responsible for the location of the mill which turned out manila bag paper. Old rope was cut on a tree stump with an axe, the pulp was boiled in a common wash boiler over the kitchen stove and the crude manufacturing process was completed in the poorly equipped mill. It is interesting to note that Amassa Howland paid $1,200 for the Bakers Falls property and power rights. The power rights alone today are estimated by engineers to be worth millions.

The International Paper Company is understood to have plans for the development of additional power at several sites along the Upper Hudson as soon as the Sacandaga reservoir is completed. The Warren Curtis Manufacturing Company, of Hadley, and the estate of the late Warren Curtis, the Iroquois Pulp and Paper Combany, of Thomson, the United Paperboard Company, of the same place, and the West Virginia Pulp and Paper Company, of Mechanicsville, are also reported planning to utilize the additional power which will be possible with the increased flow in the Hudson when the Sacandaga project is finished.

Gets Big Order for Meat Wrappers

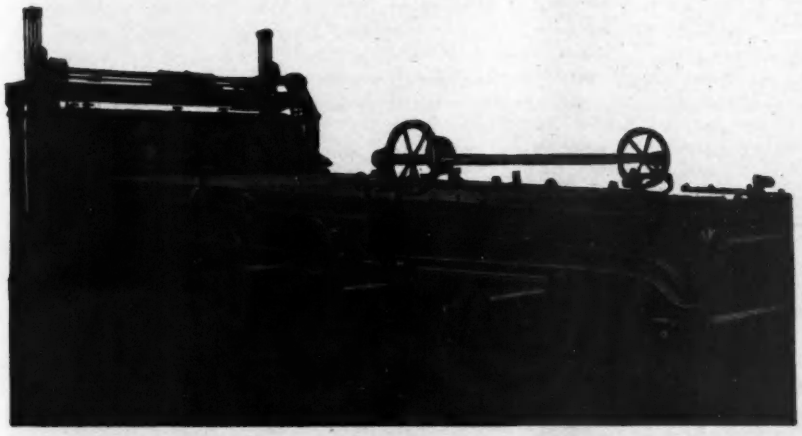
[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., August 19, 1926.—The Western Paper Converting Company, established last fall in Salem, Ore., has recently received an order from Swift & Co. for $350,000 worth of meat wrappers. This paper company has drawn considerable Eastern business since its start a few months ago. The company gets its material for manufacturing purposes from the Oregon Pulp and Paper Company, in Salem.

Can you locate the LEAKS In your plant?

THE everyday leaks and seepages of time and material, labor, money, wire changes and delays—can you locate these in your plant? How they do pile up in the year's totals: how they slow up production and reduce the profits.

In most mills where such conditions prevail, the remedy lies in the junking of obsolete, time-worn machinery and replacing it with modern, present-day equipment.



The NEW BELOIT FOURDRINIER is responsible for some remarkable results in the elimination of wasted effort, time out for repairs and in the conservation of men, material and time. This Removable, Adjustable and Shakeable Fourdrinier has demonstrated an uncanny aptitude toward bringing order out of chaos, smoothing the running efficiency of plants and turning losses into profits.

Twenty-three orders—8 re-orders—tells the story.

Investigate Now. Send for Bulletin No. 9

Smooth Running

"I had the pleasure of seeing your machine in operation. Words fail me in which to express my admiration at such a smooth-running machine."

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FOUNDED 1858 BELOIT IRON WORKS PAPER MACH BELOIT

BELOIT IRON WORKS **Beloit, Wisconsin, U. S. A.**

Trade Marks Department

CONDUCTED BY NATIONAL TRADE-MARK CO., WASHINGTON, D. C.

The following are trade mark applications pertinent to the paper field pending in the United States Patent Office, which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade Mark Company, Barrister Bldg., Washington, D. C., trade-mark specialists. As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering.

"BERTHONETTE" No. 208,429. Adolphe Schloss Fils & Cie, Paris, France. For writing paper, envelopes, pads, diaries, place cards, pencils.

"ERÈBE" No. 229,927. Nobema Products Corp., New York City. For paper and cloth and drawing paper.

"WEDNESDAY WONDER WINDOW" No. 233,030. Robert H. Rucker, Oklahoma City, Okla. For writing paper, envelopes, correspondence cards, tissue papers, and toilet papers.

SUPERBUS. No. 214,197. Zurcher Papierfabrik an der Sihl, Zurich, Switzerland. For drawing papers, typewriting paper, cardboard, writing papers.

CHINATEX. No. 229,164. District of Columbia Paper Manufacturing Company, Alexandria, Va. For cover and box-cover paper.

RO SNAP. No. 233,579. Rosnap Envelope Manufacturing Company, Inc., New York City. For envelopes, paper portfolios, paper wallets.

VOLUME. No. 233,925. Eastern Manufacturing Company, South Brewer, Me. For writing and printing papers.

BRIGHT OUTLOOK

(Continued from page 27)

tion of sulphite pulp to be used in the manufacture of rayon. The reduction of rayon prices on June last has stimulated sales to an extent that the demand for raw material has made this step necessary. Kipawa produces approximately one-half of all woodpulp used for the manufacture of rayon throughout the world.

R. A. McInnes Goes to Anglo-Canadian Co.

R. A. McInnes, manager of the Abitibi Pulp and Paper Company's mills at Iroquois Falls, Ont., has resigned his position to become general manager of the Anglo Canadian Pulp and Paper Mills at Quebec. His place at Iroquois Falls has been taken by J. E. Patterson, who joined the mill staff in 1913 in a subordinate clerical position and gradually rose to be superintendent. Mr. McInnes first joined the Abitibi Company in 1914 at the Montreal office. When the necessity for a mill manager arose in 1917 he was appointed. His duty was to take the organization which had been successful in starting the enterprise and put it into shape for the keen competition which all companies have to face. The present very high efficiency of the mill is due in great part to the grand work which he laid down.

Hollingsworth-Whitney Mill

The erection of a pulp and paper mill on the St. Croix River, near St. Stephen, New Brunswick, has been considered by the Hollingsworth and Whitney Company, which operates in Nova Scotia and Massachusetts, according to M. N. Cockburn, K. C., St. Stephen, who further stated that the company has purchased land on the St. Croix River between St. Stephen and the Parish of Dufferin, and, also, bought rights on the St. Croix River for water power development.

New Mill for Nova Scotia

Representatives of the Scott Paper Company, of Chester, Pa., have made surveys of four different sites for a pulp and paper mill in Nova Scotia. The sites are at Liverpool, Hantsport, New Glasgow and Windsor. This information was given out at Halifax, N. S., by A. W. Broughton, manager of the Company's mills at Caledonia, Queens County, which were recently destroyed by fire. Mr. Broughton said these mills would not be rebuilt. The present plans are to build a combined pulp and paper plant, the latter to consume about one-third of the pulp which the plant will produce.

Forest Protection in New Brunswick

Greater precaution with respect to slash-burning and the issue of forest travel certificates in New Brunswick, has been recommended as the result of a conference between representatives of the lumber industry and the Hon. C. D. Richards, minister of lands and mines; G. H. Prince, deputy minister; Provincial Forester L. S. Webb and G. L. Miller, of the forest service branch. The conference was held for the purpose of considering the forest fire protection policy of the department, and to discuss methods of co-operation between the lumber industry and the province with respect to fire protection. Those present were C. L. Fenderson, Jacquet River; W. H. Richards, Campbellton; J. W. Brankley, Chatham; Archibald Fraser, Fredericton; Donald Fraser, Plaster Rock, and W. E. Golding, St. John.

Canadian Paper in New Zealand

C. M. Croft, the Canadian Trade Commissioner in New Zealand, writing to the Trade and Commerce Department at Ottawa, states that New Zealand is a large importer of paper of various classes, although there are at present two paper-making factories in the Dominion. These, however, devote most of their attention to kraft paper and its products, toilet paper, etc. So far as the local mills are concerned, little detailed information is available in this connection. The latest statistical returns of factory production explain the lack of details by stating that there are so few establishments that the value of land, materials, products, etc., could be connected directly with the local mills, which is not desirable. However, the local industry has not, in the past, been able to supply the demand, and consequently a good import market for all grades exists.

Newsprint, is probably the most important class of paper imported, and Canada has been able to secure a very fair share of the trade. During 1925, 375,355 cwt. were imported (exclusive of 143 cwt. for the New Zealand Government), valued at £367,737. Canada was the largest supplier with 238,223, cwt. valued at £227,140 followed by Britain with 136,782 cwt. valued at £140,236. The total imports of news print in 1925 were 37,499 cwt. greater than in 1924: Canada's share, however, increased by 40,528 cwt. Entry is free under the British Preferential and 20 per cent ad valorem under the General Tariff.

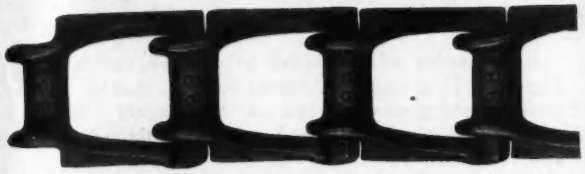
Mr. Moses Presents John Hancock House

[FROM OUR REGULAR CORRESPONDENT]

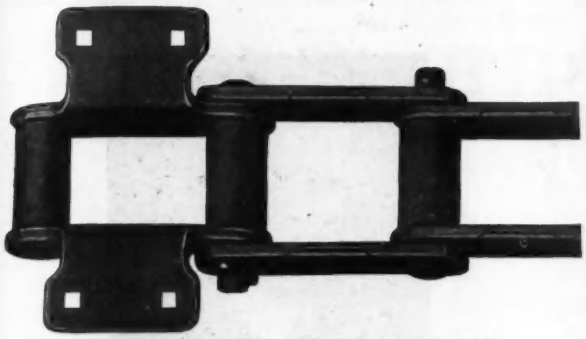
TICONDEROGA, N. Y. Aug 23 1926.—The John Hancock house, $350,000 gift of Horace A. Moses of the Strathmore Paper Company of Woronoco and Mittineague was presented Saturday to the town by Mr. Moses followed by formal dedication and elaborate exercises. The chief speaker of the day was Dr. John H. Finley, New York State Commissioner of Education, and others who took part were President James G. Riggs, president of the New York State historical society to whom the building was actually presented; Arthur C. Parker, of the Rochester (N. Y.) municipal museum, Maj. Charlton, military attache of the British embassy; Jules Henri of the French embassy, and Maj.-Gen. Charles Summerall of the United States army.

The building will house the state records, collections and records of the New York State Historical associations which will be moved from Albany to Ticonderoga.

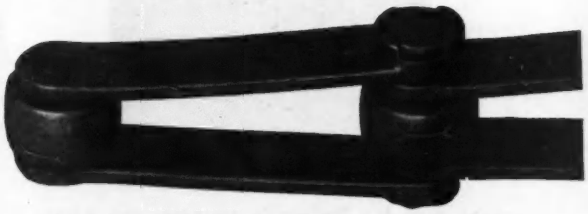
Mr. Moses who had already given to his native town the Moses Ludington hospital, the Nurses Home and the Liberty monument, erected the John Hancock house at a cost of 250,000 and also provided an endowment fund of $100,000 for its upkeep, asking the association to contribute but $25,000 toward furnishings and equipment for the building.



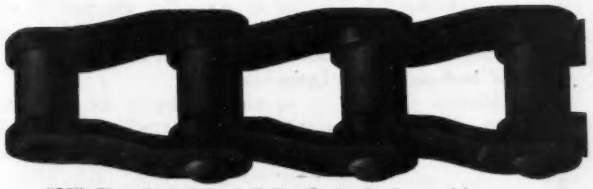
Ewart Link-Belt—furnished plain for drives, or with attachments for elevators, conveyors, etc.



"C" Class Combination chain, malleable iron and steel links, strong and inexpensive. Furnished with all popular attachments.



"1100" Class Malleable Iron Roller Chains, for heavy conveyors and elevators.



"SS" Class Bushed Steel Roller Chain, for heavy drives.

Link-Belt Silent Chain. The Master Power Transmitter. Good for highest chain speeds.

Genuine Link-Belt Chain for Conveying, Elevating, Power Transmitting

More Efficient
More Lasting
More Economical

Our Engineers are ready to co-operate with YOU in choosing the right type.

We Make Them All.

2869

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Huntington, W. Va., Robson-Prichard Bldg.
Cleveland . . . 329 Rockefeller Bldg.
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LINK-BELT

New York Trade Jottings

M. J. Ryan, of the Hummell-Ross Fibre Corporation, of Hopewell, Va., and his son, W. J. Ryan, are enjoying a vacation at Ausable Forks, New York.

* * *

F. G. Robinson, representative of the Kipawa Mill, of the International Paper Company, has just sailed for Japan, to aid in developing the Far Eastern market for raw materials used in making rayon.

* * *

James Fitch, paper mill superintendent, of the Cascade Paper Company, Steilacoom, Wash., has been visiting the various paper manufacturing centers in the East. Mr. Fitch has also been visiting the leading machine manufacturers in this territory.

* * *

Howard Butt, formerly with the Riley Stoker Corporation, has joined the sales staff of the Air Preheater Corporation, manufacturers of the Ljungstrom Air Preheater, of 25 Broadway, New York. Mr. Butt is well known throughout the power plant field, as well as in the steel industry.

* * *

Following a long and comprehensive inspection tour of the western and Canadian paper mills, R. S. Kellogg, secretary of the News Print Service Bureau, and W. G. MacNaughton, secretary of the Technical Association of the Pulp and Paper Industry, are returning to New York, and are expected to arrive in the city on Saturday evening.

* * *

O. M. Porter, assistant secretary of the American Paper and Pulp Association, and D. A. Crocker, secretary of the Woodlands Section, attended the summer meeting of the New England and New York divisions of the Society of American Foresters, at Bread Loaf Inn, on the 30,000 acre Battel forest of Middlebury College, Vermont, early this week.

* * *

For the past several years, the J. F. Auer Paper and Board Corporation, of 475 Fifth Avenue, New York, have confined their efforts primarily to paper board, operating the Luzerne Paper Mills, the Northampton Paper Mills and the Bentley Paper Mills. In April of this year, the corporation took on the sales agency for four additional mills, and are now in a position to offer kraft paper, sulphite papers and specialties as direct mill representatives selling to jobbers only. This department is in charge of E. E. Ketcham, who has had extensive experience, and is well known to the paper jobbers throughout the East.

July News Print Statistics

Production of news print in the United States, according to the News Print Service Bureau, during July, 1926, amounted to 140,516 tons and shipments to 142,690 tons. Production in Canada amounted to 163,037 tons and shipments to 161,824 tons, making a total United States and Canadian production of 303,553 tons and shipments of 304,514 tons. There were also 16,850 tons of news print made in Newfoundland and 956 tons made in Mexico, so that the total North American production in July, 1926, was 321,359 tons. The news print mills also made 1,742 tons of hanging paper in July, 316 tons of which were made in Canada.

During July the United States mills operated at 95 per cent of rated capacity and the Canadian mills at 99 per cent.

The United States mills made 11 per cent more in the first seven months of 1926 than in the same period of 1925 and the Canadian mills made 22 per cent more than in the first seven months of 1925.

The combined production of the United States and Canadian mills in the first seven months of 1926 was 16 per cent more than in the same period of 1925.

Stocks of news print paper at United States mills totaled 16,524 tons at the end of July and at Canadian mills 12,963 tons.

New Head of National Paper & Type Co.

At a meeting of the Board of Directors of the National Paper and Type Company, August 3, F. P. Maddox was elected president and general manager of the Company. Mr. Maddox will leave shortly for a several months trip through part of his field.

The new president of the National Paper and Type Company, takes up the duties of H. C. Lewis, general manager, who died February 5, 1926, and of Mr. R. W. Nelson, president, who died July 28, 1926.

F. P. Maddox

The selection of Mr. Maddox by the board was a logical one, eminently satisfactory from all points of view. He is the oldest member of the organization in point of service, having been associated with the company for 20 years, for the past 19 years as manager of the Havana branch of the National Paper and Type Company. Mr. Maddox, however, can count a total of 30 years of business life in Latin-America.

Mr. Maddox combines to an unusual degree the qualities of a suitable executive; personal popularity, practical field experience and many years of constructive and outstanding achievement.

Clark and Hatch Buy Burnside Plant

The Gibbs-Brower Company has sold the paper mill of the East Hartford Manufacturing Company of Burnside, Conn., for L. S. and R. S. Forbes, former owners, to F. B. Clark of Kalamazoo, Mich., formerly secretary of the Hawthorne Paper Company there, and R. S. Hatch, well known paper chemist of Dayton, Ohio, formerly with the Mead Pulp and Paper Company of Chillicothe, Ohio, and also a former president of the Technical Association of the Pulp and Paper Industry. They will operate the mill at once on high grade papers and have the situation well lined up for a successful business.

Bids for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., August 25, 1926.—The Government Printing Office will receive bids on August 27 for 80,000 pounds (32,000 sheets) of No. 2 quality, 25 x 30—No. 20 binders board. Bids will also be received on the same date for 3,000 pounds (10,000 sheets) of 17 x 28—303 pounds manila cardboard.

The Government Printing Office will receive bids on August 27 for 38,450 pounds (250,000 sheets) of various sizes double coated rag book paper.

SELF SUPPORTING

We have developed a self supporting steam or water joint for calenders. The adjustment is automatic when the plugging of the sheet separates the rolls.

Over one hundred now in use

Ask Us

The Pusey and Jones Company

WILMINGTON, DELAWARE
U. S. A.

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending June 30, 1926, and for the Twelve Months Ending June 30, 1926

as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER

	June				Twelve Months Ending June 30			
	1925		1926		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Paper and manufactures (total)	.....	10,122,593	.....	12,164,061	.....	117,486,821	.....	127,165,998
Printing paper—								
Standard newsprint .....lbs...free	252,814,816	9,012,592	325,944,871	10,834,743	2,815,072,939	102,089,345	3,216,639,420	111,374,856
Imported from—								
Finland	3,976,562	126,178	7,980,222	231,049	61,187,135	1,936,735	48,970,250	1,454,770
Germany	4,276,889	140,301	357,056	10,909	53,857,205	1,629,399	43,861,859	1,345,697
Netherlands	7,511	280	.....	.....	1,695,167	55,912	352,849	10,600
Norway	4,414,996	125,770	673,688	20,927	44,902,028	1,391,915	16,925,570	510,912
Sweden	9,755,172	291,940	11,160,009	333,808	148,301,820	4,561,879	107,258,569	3,259,394
Canada	228,607,802	8,266,763	274,727,465	9,222,824	2,489,452,910	91,995,171	2,909,992,754	101,849,394
Other countries	1,775,884	61,360	31,046,431	1,015,226	15,676,674	518,334	89,277,569	2,944,089
All other, n. e. s.....lbs...dut.	1,087,828	53,873	1,204,952	62,632	23,548,742	1,072,281	14,750,233	743,579
Grease-proof and water-proof papers..lbs...dut.	144,584	18,080	195,416	38,939	1,636,701	199,907	2,366,196	358,884
Kraft wrapping paper .....lbs...dut.	820,979	35,572	1,107,356	50,082	19,364,172	784,240	10,911,214	477,646
All other wrapping paper.....lbs...dut.	401,188	22,490	684,965	47,133	11,803,196	491,478	4,895,407	331,863
Writing, drawing, bond, etc.....lbs...dut.	273,152	58,252	252,856	67,547	3,116,548	699,084	3,522,090	823,999
Surface coated .....lbs...dut.	149,933	45,917	145,573	64,584	1,879,814	510,541	1,762,718	650,586
Tissue paper .....lbs...dut.	230,521	105,568	236,685	123,723	2,876,686	1,173,137	2,574,198	1,154,194
Pulp boards in rolls .....lbs...dut.	6,635,718	169,090	6,538,765	158,304	70,921,487	1,890,061	74,985,647	1,884,506
Other paper boards, n. e. s.....lbs...dut.	2,691,321	62,406	3,148,090	69,713	32,009,633	749,537	30,629,895	750,485
Cigarette paper, cigarette books and covers .....lbs...dut.	445,279	110,475	751,089	186,260	9,010,300	2,487,910	10,734,913	2,977,073
Hanging paper .....lbs...dut.	264,287	33,133	204,880	36,898	9,443,222	544,706	4,429,621	607,387
Paper boxes .....lbs...dut.	179,803	102,403	196,354	84,579	2,299,093	1,457,063	2,117,357	1,082,512
Pulp or papier-mache and manufactures of, n. e. s. .....lbs...dut.	.....	.....	113,041	29,751	.....	.....	1,073,083	191,976
Duplex decalcomania, not printed.....lbs...free	26,642	6,152	123,051	29,537	500,550	124,133	566,541	141,299
All other ....dut.	.....	286,590	.....	279,456	.....	3,213,398	.....	3,615,153

WOOD PULP

Mechanically ground wood pulp.....ton..free	26,536	813,093	23,274	649,078	266,476	8,223,268	278,714	7,967,777
Chemical wood pulp—								
Sulphite, unbleached .....ton..free	48,536	2,696,093	57,450	3,388,933	612,114	32,652,277	587,314	33,273,010
Sulphite, bleached .....ton..free	21,847	1,787,873	28,288	2,210,245	305,658	23,143,918	280,355	22,627,795
Total sulphite .....ton	70,383	4,483,966	85,738	5,599,178	917,772	55,796,195	867,669	55,900,805
Imported from—								
Finland	2,754	147,177	2,177	97,563	55,642	2,834,036	50,138	2,748,000
Germany	4,144	268,206	5,910	407,316	80,032	4,746,047	68,832	4,513,905
Norway	4,654	373,359	6,326	475,888	75,796	5,366,726	67,424	5,324,353
Sweden	22,630	1,284,133	38,900	2,355,965	319,788	17,942,367	248,890	15,102,817
Canada	34,273	2,309,763	30,531	2,079,141	352,662	23,007,804	405,641	26,677,053
Other countries	1,928	101,328	1,894	183,305	33,852	1,899,215	26,744	1,534,677
Sulphate pulp, unbleached (Kraft pulp) .....ton..free	28,565	1,691,593	33,635	2,153,519	312,211	17,869,204	304,641	18,954,373
Imported from—								
Finland	3,503	193,236	1,243	79,891	16,441	827,797	19,718	1,117,422
Norway	309	16,967	1,058	64,770	12,012	662,483	10,963	692,290
Sweden	15,766	887,219	18,903	1,176,339	156,968	8,372,654	134,707	8,000,938
Canada	8,841	586,886	12,229	818,255	121,992	7,753,356	134,442	8,821,341
Other countries	146	7,285	202	14,264	4,798	252,914	4,811	322,382
Sulphate pulp, bleached .....ton..free	860	52,131	2,571	165,525	32,343	1,836,907	18,110	1,071,301
Other pulp .....ton..free	574	29,530	294	19,607	2,641	168,283	1,545	104,464

CRUDE PAPER STOCK

Rags for paper stock .....lbs...free	43,861,737	1,125,601	30,638,162	640,564	581,857,187	15,560,655	523,159,824	12,998,686
Waste bagging, waste paper, etc.....lbs...free	7,443,673	134,046	7,850,903	186,324	117,440,533	1,732,721	132,396,441	2,581,184
Old rope and all other paper stock...lbs...free	6,055,389	326,820	12,362,342	282,171	81,724,037	4,434,849	81,095,121	3,407,748

CHEMICALS AND OTHER PAPER MAKERS' MATERIALS

Colors, dyes, stains, color acids, and color bases, n. e. s. .....lbs...dut.	558,776	726,997	777,880	864,119	5,176,985	7,046,847	5,157,064	5,669,521
Imported from—								
France	26,744	33,413	9,258	6,324	142,271	199,780	137,003	184,555
Germany	275,584	393,540	476,433	513,886	2,620,018	3,691,244	2,515,454	2,685,125
Italy	21,769	29,517	5,677	5,971	212,603	281,718	102,694	116,027
Switzerland	173,180	179,569	237,323	277,289	1,632,571	2,158,800	1,956,560	2,097,830
United Kingdom	12,403	10,355	29,925	27,484	175,177	154,420	161,654	147,271
Other countries	49,096	80,603	19,264	33,165	394,345	560,885	283,699	438,713
Casein or lactarene .....lbs...dut.	1,743,788	156,232	3,157,627	374,514	19,515,979	1,462,526	23,032,766	2,204,075
Kaolin, china, and paper clay.....ton...dut.	30,249	284,424	23,312	242,710	329,199	3,167,252	328,533	3,258,194

(*Continued on page 46*)

Turning Grinder Rejects Into Dollars

The Valley Refiner

You can make a saving in your plant by installing the Valley Refiner

Turning grinder rejects into dollars is the function of the Valley Refiner. This machine is built in Single and Twin types with capacities of 2 and 4 tons of groundwood pulp daily respectively. Not only does the Valley Refiner eliminate waste, but it turns the waste into a profitable product. The savings effected will pay for the machine within a short time. In your mill it will prove to be worth many times the purchase price

A letter will bring further information regarding the waste saving possibilities of the Valley Refiner. Do not fail to learn more about this exceptional machine.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office: 350 Madison Avenue

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(*Continued from page 44*)

EXPORTS—PAPER

PAPER AND MANUFACTURES OF	June 1925 Quantity	June 1925 Value	June 1926 Quantity	June 1926 Value	Twelve Months Ending June 30 1925 Quantity	Twelve Months Ending June 30 1925 Value	Twelve Months Ending June 30 1926 Quantity	Twelve Months Ending June 30 1926 Value
Paper and manufactures (total)	.....	1,925,098	.....	2,138,190	.....	23,021,996	.....	25,773,842
Printing paper—								
News print paper ....lbs.	6,251,916	262,586	3,051,746	140,602	39,046,251	1,849,599	44,600,666	2,054,776
Exported to—								
Canada	226,621	15,151	86,708	6,188	1,108,798	78,768	1,190,752	84,210
Central America	68,899	3,390	103,188	4,309	799,988	42,756	1,628,022	80,764
Mexico	65,945	3,298	93,888	4,742	1,927,249	98,959	1,515,099	80,846
Cuba	3,093,485	119,969	675,496	32,161	19,047,937	802,452	9,767,894	414,991
South America	637,726	30,100	487,131	22,378	6,234,480	304,880	7,451,462	345,959
China	964,644	38,205	509,090	22,498	3,356,780	201,940	8,909,683	405,013
Philippine Islands	918,394	41,017	762,558	31,311	4,981,282	227,349	6,670,830	305,808
Other countries	276,202	11,456	333,687	17,015	1,589,737	92,495	7,466,924	337,185
Book paper, not coated ....lbs.	1,383,670	160,609	1,238,394	151,286	19,409,456	2,132,844	16,944,335	1,791,127
Exported to—								
United Kingdom	11,604	2,331	116,965	36,914	352,183	72,499	256,009	56,346
Canada	185,705	22,949	221,158	22,029	1,997,394	245,426	2,798,521	293,420
Central America	55,830	6,341	47,903	5,174	647,955	70,712	680,885	72,889
Mexico	67,002	7,707	65,247	6,594	2,186,748	248,892	1,686,959	184,236
Cuba	426,146	40,863	177,879	15,473	4,577,225	470,614	3,359,219	322,101
Argentina	73,905	7,215	109,904	8,218	646,652	66,168	802,512	82,860
Brazil	49,951	6,032	54,309	6,130	356,740	43,085	278,442	39,364
Venezuela	76,179	7,104	25,562	2,448	534,091	56,586	763,806	75,122
Other South America	49,830	5,411	91,579	10,400	1,306,090	139,433	1,181,089	113,596
China	92,153	20,832	24,922	7,175	3,648,724	361,154	1,173,733	161,850
Philippine Islands	108,602	12,678	87,622	7,673	1,244,201	120,062	1,822,689	162,049
Australia	45,832	6,103	110,487	12,093	527,500	59,708	558,184	60,367
Other countries	140,931	15,043	104,677	10,965	1,383,953	178,505	1,582,287	166,927
Cover paper ....lbs.	101,476	20,705	67,870	15,045	1,065,039	207,054	1,278,740	234,570
Grease-proof and waterproof paper ....lbs.	145,779	20,148	188,112	32,314	1,639,822	198,637	2,376,837	349,477
Wrapping paper ....lbs.	2,075,438	145,951	2,623,489	172,149	26,876,463	2,087,060	31,360,394	2,232,926
Surface-coated paper ....lbs.	405,702	50,920	443,465	48,837	3,606,278	514,029	5,621,121	723,871
Tissue and crepe paper ....lbs.	270,578	80,669	406,221	93,105	3,315,757	898,574	4,032,654	1,015,552
Toilet paper ....lbs.	426,525	49,028	326,818	44,432	4,746,644	567,917	4,814,482	589,384
Paper towels and napkins ....lbs.	82,152	15,823	129,950	21,867	1,314,694	214,910	1,936,610	282,258
Box board ....lbs.	1,928,310	64,613	5,884,553	159,694	[4] 6,492,944	[4] 242,951	40,957,021	1,259,750
Bristols and bristol board ....lbs.	51,293	7,058	94,228	12,017	798,086	101,056	1,413,093	166,115
Other paper board and strawboard ....lbs.	3,652,431	159,906	2,803,655	147,996	50,314,652	2,013,898	35,049,871	1,803,689
Sheathing and building paper ....lbs.	689,029	32,768	918,871	37,048	10,934,393	521,242	12,190,762	545,492
Wall board of paper or pulp....sq. ft.	777,643	24,594	2,566,215	96,840	14,507,584	491,941	18,674,091	635,549
Blotting paper ....lbs.	198,041	22,546	376,550	42,364	2,695,123	319,120	3,291,008	412,941
Filing folders, index cards, and other office forms ....lbs.	49,031	17,415	80,006	23,234	535,803	175,087	786,383	244,827
Papeteries (fancy writing paper) ....lbs.	38,513	13,491	38,173	11,900	492,270	168,073	590,906	207,503
Other writing paper ....lbs.	216,908	39,716	761,915	107,475	3,253,714	546,217	7,320,367	1,253,570
Cigarette paper and books ....lbs.	13,447	5,222	11,527	2,781	523,357	165,483	515,907	132,639
Paper hangings (wall paper) ....yds.	1,160,666	25,454	668,050	18,161	24,643,636	612,542	22,317,249	559,428
Paper bags ....lbs.	837,656	73,882	729,080	68,227	11,727,290	1,010,433	12,335,644	1,102,215
Boxes and cartons ....lbs.	1,246,834	94,072	1,238,521	104,821	14,418,868	1,209,103	19,275,367	1,400,578
Envelopes ....lbs.	177,503	33,385	224,009	42,272	2,573,895	486,708	2,508,372	476,828
Vulcanized fiber, sheets, strips, rods, and tubes ....lbs.	461,176	128,791	430,430	128,664	4,813,347	1,478,725	5,841,959	1,724,622
Manufactures of vulcanized and indurated fiber ....lbs.	28,939	13,974	38,930	14,579	434,341	193,580	434,662	160,907
Cash-register and adding-machine paper....lbs.	134,125	12,920	146,813	14,856	1,435,134	150,669	1,746,380	181,445
Other paper and paper products	.....	348,852	.....	385,624	.....	4,464,544	.....	4,231,803
WOOD PULP AND PAPER STOCK								
Sulphite wood pulp ....tons	1,473	77,078	1,729	114,483	22,233	1,308,620	21,754	1,427,953
Soda wood pulp ....tons	319	31,997	38	3,432	2,085	197,150	3,281	242,575
Other wood pulp ....tons	108	8,980	653	32,999	8,707	925,501	7,647	716,057
Rags, and other paper stock ....lbs.	15,557,099	251,242	19,909,965	252,216	148,538,543	2,473,763	188,984,932	3,206,854
PAPER AND PULP MILL MACHINERY								
Paper and pulp mill machinery ....lbs.	440,351	199,247	1,171,773	235,499	7,189,517	1,669,543	10,677,229	2,409,461

[4] Beginning Jan. 1, 1925.

Good Paper Demand in Cleveland

CLEVELAND, August 23, 1926.—Business is so good with the paper jobbers that they are surprised and unable to determine the exact reason. Most of the larger houses report business far ahead of last year and, while July and August are normally the dull months, sales have been so active that some executives are deferring vacations until fall.

One reason for the good summer business is the late spring. Buying was slow and reserve stocks in the hands of the consumer have been so reduced that buying at this unusual time has become necessary. It is gratifying to the jobbers to note that the demand from the Cleveland district has greatly improved. One reason for this is that business men, disgusted with the five-months building strike that has tied up business to a great extent, have gone ahead with building regardless of labor troubles. This work, although slow, is making progress and is having its effect in increased business generally.

Fewer shops are closed for inventory and repairs than usual this summer and the printers are, as a result, more active in demands upon paper jobbers with the result that the latter part of August has witnessed extensive sales of finer papers. Wraps have also kept up the pace and, in fact, there is no branch of the paper business that has experienced a summer slump.

Credits continue to be a source of concern of the paper credit men. However, the worst they will announce for publication is that the situation is "fair."

and further—

Ball Bearings Put Continuous Production Into Your Paper Mill

New Departure Ball Bearings do not wear to an extent which would require "taking-up" or readjustment of any kind.

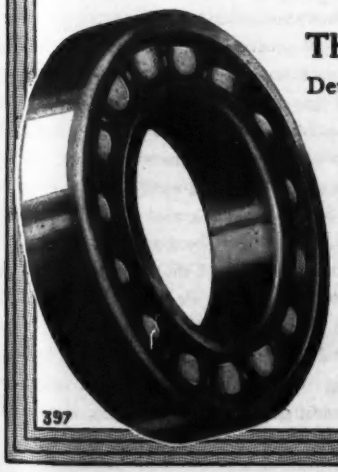
What does this mean to you?

Any bearing which *does* wear automatically changes the relationship of closure devices and therefore *cannot* be housed permanently to keep out water, acid fumes and other foreign destructive matter.

But with New Departures lending themselves to oil-retaining and dirt excluding housings, your production schedule need never be held up because of bearing failures.

New Departures give you many other advantages, but this feature alone should make you interested in studying their possibilities in safeguarding your production and lowering its cost.

Technical application data and engineering consultation service upon request.



The New Departure Manufacturing Company

Detroit Bristol, Connecticut Chicago

New Departure Quality Ball Bearings

397

PAPER TRADE JOURNAL
ESTABLISHED 1872
With Which Is Combined
PAPER
The Magazine of the Paper Industry
HENRY J. BERGER, Editor
Member A. B. C. Audit Bureau of Circulations
Vol. LXXXIII New York, August 26, 1926 No. 9

PAPER EXPORTS HAVE GOOD YEAR

The paper export trade of the United States appears to have fully recovered from the depression of the early post war years, exports for the fiscal year ended June 30, which reached a total value of $25,773,842, not only having exceeded the previous year's shipments by 12 per cent, but also surpassing any previous year since 1921, according to the Paper Division of the Department of Commerce.

This high record was attained notwithstanding that the average export value of most classes has shown a strong downward trend during the past twelve months. A further matter for congratulation is that with few exceptions exports during the last half of the year exceeded the preceding six months as well as the corresponding period in 1925. While nearly all classes contributed to the increased shipments during the past year, proportionately the heaviest increases occurred in writing, surface-coated, and greaseproof papers, boards, and a number of paper specialties, including towels and napkins, filing folders, and boxes and cartons. In addition to paper and boards and paper products, $5,655,618 worth of paper base stocks were shipped from the United States during 1925-26, an increase of nearly 15 per cent over the preceding year.

The volume of news print exports during the past year were 14 per cent above those of the preceding twelve months, although owing to the generally lower average export price the value of the shipments increased only 11 per cent. Allowing for seasonal fluctuation, this is one of the few classes in which the volume of shipments has shown a conspicuous tendency to fall off during the past six months or so. The downward trend is primarily due to the continued decline in shipments to Cuba, which during 1925-26 were approximately 50 per cent under those during the preceding year, and as nearly a half of the 1924-25 news print shipments were taken by Cuba, gains in other important markets during the past year were not sufficient to offset this loss. Exports of book paper, which have been declining for over a year, registered a decrease of 13 per cent in comparison with similar exports in 1924-25. The loss in this class is also due to the heavy decline in shipments to the Cuban as well as the Chinese market. In contrast to news and book papers, exports of cover and surface-coated papers have risen more or less steadily during the past year, aggregate shipments showing gains of 20 per cent and 56 per cent, respectively, over the preceding year. The average export values of these two classes, as well as of news print and book paper, have shown a downward trend during the past twelve months.

Exports of wrapping paper from the United States up to the end of the year continued to show a slow but steady growth, shipments during the quarter ended June 30 exceeding those of the preceding three months by 12 per cent and of the corresponding quarter in 1925 by 18 per cent. Shipments for the entire fiscal year aggregated 31,360,000 pounds, an increase of 4,485,000 pounds, or 17 per cent, over 1924-25. A proportionately heavier increase took place in exports of greaseproof and waterproof papers, which rose from 1,640,000 pounds to 2,377,000 pounds during this period. This class also showed a steady upward trend during the year, the last quarter's shipments exceeding the aggregate for the previous three months by 22 per cent and the corresponding quarter in 1925 by 23 per cent. Paper bag shipments, on the other hand, have fluctuated considerably with, on the whole, a distinct downward trend observable, and while exports for the past fiscal year registered a slight increase over 1924-25, those for the quarter ended June 30 did not reach the volume of the preceding quarter or the corresponding three months last year. The principal losses in this class were sustained in shipments to the Canadian, Mexican, Cuban, and South African markets.

One of the most important gains made by American paper exporters during 1925-26 was in writing papers. Exports of this class reached their lowest point at the beginning of 1925, and since that time have shown an almost steady rise in volume from month to month. Shipments for the past fiscal year, totaling 7,320,000 pounds, were two and one-fourth times as great as for the preceding year, and also exceeded the 1923-24 shipments by 36 per cent. Exports of papeteries were also larger, the year's shipments showing a gain of 20 per cent, while exports of envelopes again underwent a slight decline. Exports of other fine papers and of paper specialties, while not making an advance comparable to that made by writing papers, were in most cases considerably above the 1924-25 shipments.

The heaviest gains during 1925-26, from the standpoint of volume, were made in exports of boards, shipments of all classes showing a growth over the preceding year, and in most cases over 1923-24. Boxboard exports, which ranked second to news print in tonnage, were not recorded separately prior to January, 1925, but since that time have shown an almost uniformly upward trend from month to month, exports during the quarter just ended having been nearly 20 per cent greater than those of the preceding three months, and more than three times as great as those shipped during the corresponding quarter in 1925. Exports of straw boards and other paper boards (excluding bristols), which held fairly steady at around 2,500,000 pounds a month during the last six months of 1925 have also shown an upward trend during the last six months, shipments for the quarter ended June 30 averaging 3,300,000 pounds monthly. Including boxboard, shipments of paper boards and straw board from the United States during the past fiscal year totaled 76,007,000 pounds, or approximately 35 per cent more than in 1924-25. A similar increase also occurred in exports of paper boxes and cartons, which rose from 14,419,000 pounds to 19,275,000 pounds. Exports of bristol boards, vulcanized fiber, wall boards, and sheathing and building papers were in all

cases considerably in excess of the preceding year, increases ranging from 10 per cent for sheathing and building papers and 20 per cent for vulcanized fiber to 30 per cent for wall boards, and 77 per cent for bristols.

Imports of paper and paper base stocks into the United States rose in value from $237,311,286 in 1924-25 to $243,542,548 in 1925-26. This increase was almost entirely due to the rise in imports of standard news print, which represent 88 per cent of the paper and board receipts, and 45 per cent of the total receipts of paper and paper base stocks. Incoming shipments of other classes of paper and board into the United States during 1925-26 were only two per cent over those of the previous year.

Imports of paper base stocks during the past year declined slightly in comparison with 1924-25, receipts of pulpwood, which totaled 1,329,508 cords having fallen off 3 per cent, and other paper base stocks, totaling 1,799,102 tons, 4 per cent. All classes shared in this decrease, with the exception of mechanical groundwood and waste stock, which were somewhat larger than in the preceding year. Imports of chemical pulp, which fell 7 per cent under the previous year, have been improving during the past few months, receipts for the quarter ended June 30 exceeding those for the previous quarter as well as for the corresponding quarter in 1925. An opposite trend, however, is discernible in incoming shipments of pulpwood, mechanical groundwood, and rags.

Imports of paper and paper products into the United States during the past fiscal year were valued at $127,165,998, an increase of 8 per cent over the preceding year. As previously stated, this increase was primarily due to the increase in imports of standard news print which comprise 88 per cent of the paper and board receipts. Increases in the remaining classes were confined to cigarette, writing, and greaseproof papers, and pulp boards, aggregate receipts showing rise from $15,397,476 to $15,791,142. Ninety per cent of the standard news print receipts during 1925-26 came from Canada, which increased its shipments to us by 210,270 short tons, or 17 per cent.

Sweden and Germany, after Canada, were the principal source of supply for imported papers during 1925-26, approximately one-third of the news print paper supplied by European countries and three-fourths of the wrapping papers coming from the former, while from the latter were received approximately one-half of the surface-coated, writing, and greaseproof papers, nearly one-third of the printing and tissue papers, and one-fourth of the paper boxes. Other leading competitors were France, which supplied nearly two-thirds of the paper boxes and practically all of the cigarette paper, and the United Kingdom, which supplied nearly 40 per cent of the tissue paper, 15 per cent of the surface coated paper, and 10 per cent of the writing paper.

Swedish Paper Prices Unchanged

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., August 25, 1926.—Pulp and paper prices on the Swedish market have shown no change for some time, quotations on the former up to the end of July ranging from $1.58 to $1.75 for dry mechanical groundwood to $2.67 to $2.85 for strong sulphites and sulphates, and $3.34 to $3.83 for bleached sulphite, per 100 pounds, Swedish port. Kraft prices are quoted at $4.25 to $7.05 according to quality, M. G. Sulphites at $4.13 to $6.56, greaseproof papers at $5.10 and newsprint paper at $3.28, all per 100 pounds, f.o.b. Swedish port.

Cushnoc Paper Corp. Formed

AUGUSTA, Me., August 13, 1926.—To accomplish a reorganization of the Cushnoc Paper Company and the Kennebec Paper Company, adjudicated bankrupts in January, 1922, and an increase in the output of the mills, a new corporation has been organized known as the Cushnoc Paper Corporation, with the following officers and directors: President and treasurer, Walter S. Wyman of Augusta; vice president and general manager, F. C. Bagley of Augusta; secretary and clerk, E. H. Maxcey of Augusta; directors, Walter S. Wyman, Blaine S. Viles of Augusta, E. T. Wilkinson of New York City and Hugh White of New York City.

The new concern has an authorized capital stock of 15,000 shares of no par value, all of which is common stock. Under the by-laws of the corporation this stock may be issued in fractional parts of one or more fifths of a share, as well as in full shares.

According to a letter issued by the officials of the new corporation today, it is proposed to issue this common stock of the corporation in exchange for claims of unsecured creditors against the consolidated bankrupt estate, all of which is provided for in the certificate of organization and the by-laws of the new corporation. The basis of exchange will be one share of the common stock for each hundred dollars of claim as allowed in the bankruptcy court. Creditors holding claims of less than one hundred dollars will be given fractional shares consisting of one-fifth of a share for each full twenty dollars of claim.

The assets of the bankrupt estate are to be sold at public auction and the new corporation plans to bid at that auction such price as it believes justifiable.

Relative to additions to the plant, the letter issued says:

"The trustees and the manager of the mills believe that if the new paper machine is installed and the mills are put in a condition to manufacture one hundred thirty-five to one hundred forty tons of news print per day the cost of installing the new machine can be paid for within two years from the earnings. The estimates in this case have been carefully made. All creditors, however, should clearly understand that like all estimates they may be materially affected by contingencies which cannot now be foreseen. They are the result of the best judgment of all connected with the management but are not and cannot be in any sense guaranteed."

Resigns From Hawley Pulp & Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., August 19, 1926.—Theodore Osmund, secretary-treasurer of the Hawley Pulp & Paper Company, Oregon City, Ore., has resigned to become president of the West Coast Pulp and Paper Company at Tumwater, Wash., a suburb of Olympia. Mr. Osmund will dispose of his home in Portland and leave at once for the Washington city. He had been connected in various positions with the Hawley company for eighteen years.

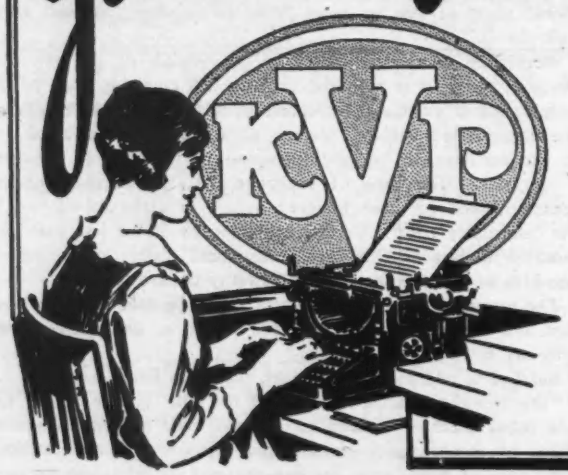
E. A. Chapman, formerly assistant secretary-treasurer of the Hawley Pulp and Paper Company, will assume the former duties of Mr. Osmund. Mr. Chapman in turn will be succeeded by Robert Peters of Portland.

The mill at Tumwater is a new concern with a capital stock of $1,250,000, the mill site being the old buildings of the Olympia Brewing Company, which will be remodelled for their present purpose.

St. Helens Paper Co. Offers Common Stock

ST. HELENS, Ore., August 19, 1926.—The St. Helen's Pulp & Paper Company is offering at par 1050 shares of common stock remaining in the company's treasury. Proceeds from the sale will be used toward completion of the project and new plant under way at St. Helens, which will cost more than $2,000,000 when completed. W. P. Hawley is president of this company.

Uncle Jake says

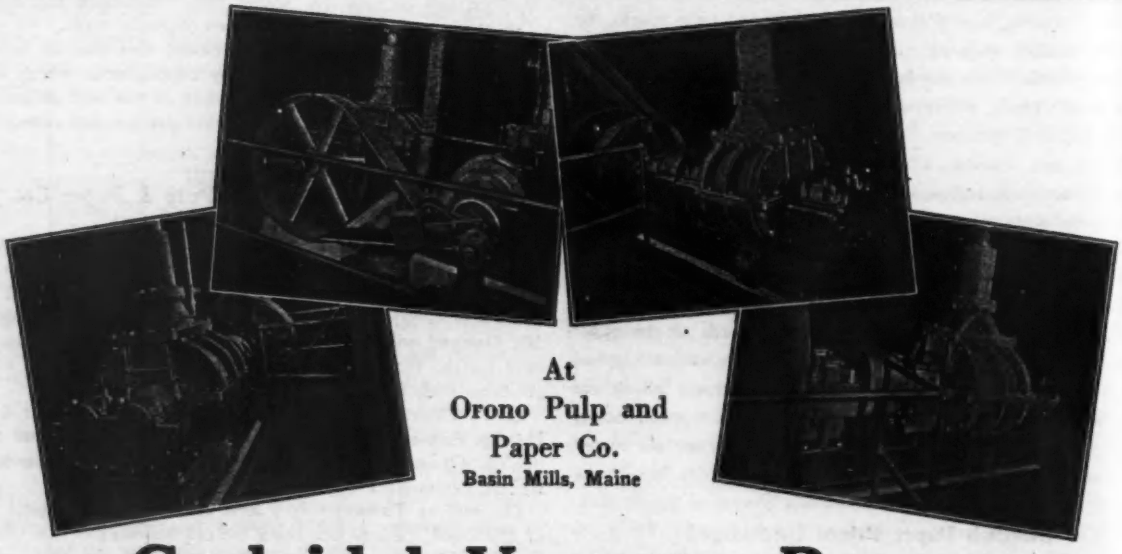


As a tight collar choketh off the wind, so doth the thought of fear close the door on success.

VERY FEW people achieve success single handed and alone. Success is achieved by cooperation—by mixing brains and effort.

When we help you we help ourselves. In K.V.P. Bond Paper we have a product that is so far in advance of just ordinary bond paper that we do not hesitate to recommend it to you with positive guarantee back of it.

Uncle Jake
of the
KALAMAZOO VEGETABLE PARCHMENT CO.
KALAMAZOO, MICHIGAN



At
Orono Pulp and
Paper Co.
Basin Mills, Maine

Cycloidal Vacuum Pumps

are serving suction couch and press rolls, and also the felt conditioner, economically and dependably. Why not your plant, too?

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

Preparation of Electric Insulating Materials From Hardened Impregnated Papers.*

By L. Bouvier

During the war impregnated papers were used on a large scale for the manufacture of electric insulators, as substitutes for rubber and porcelain, both of which were very scarce in Germany. The new insulator gave such good results that its production, born of dire necessity, instead of being discontinued after the cessation of hostilities, was, on the contrary, intensified and improved.

It is now a well established fact that a suitable paper, impregnated in appropriate manner, can acquire such remarkable mechanical and electrical properties as to make it equal, if not superior, to the insulating materials in use at the present time.

Electrotechnique covers such a wide field that it is readily understood that no single material can be satisfactory for insulating purposes under all conditions. The electrician must judge each case on its own merits in selecting a proper insulator, and the chemist must supply him with the materials suitable for the conditions under which they are to be used. Amongst these may be mentioned. glass, porcelain, asbestos compositions, natural and synthetic resins, shellac, vulcanized rubber, hardened casein, celluloid, silk, oils, lacquers, etc. In the present state of our knowledge, hardened impregnated papers may be considered as suitable substitutes for solid insulators, having due regard for the facts that it cannot be glued, it cannot be used in place of such materials as silk threads for insulating electric wires and cables, and particularly that it is not suitable for use out-doors or in other places where it would be exposed to the action of moisture.

In the preparation of hardened papers for this purpose, the properties required of a good insulator must be kept in mind. Besides the necessary mechanical strength (resistance to bending, shocks, vibration and pressure), the material must possess good machining qualities (drilling, planing, milling, sawing, grinding, stamping) and a uniform electrical resistivity throughout. It should also be heat resistant, so that it is unaffected by the highest temperature to which it can be subjected in use, and at the same time its dielectric constant must remain unaffected at this temperature.

Up to the present time, it has not been found possible to make an impregnated hardened paper resistant to the action of moisture. They are all more or less affected by water and swell up, and finally water passes right through them. For this reason they cannot be used outdoors. In view of the exacting requirements which the finished product must meet, it is evident that very great care must be taken in its preparation, and an apparently slight inattention may easily ruin a whole day's output.

Hardened impregnated papers are marketed under the most varied names, such as *Pertinax, Faturan, Bituba, Bakelite-Dilecto,* etc. They all consist of several sheets of paper impregnated with an insulating material and subjected to the action of pressure and heat, after which they are treated mechanically to give them the required shape

The thickness of the sheets obtained by pressing varies from 0.1 to 300 millimeters, and their size depends on the size of the presses. Sheets for the manufacture of switchboards can be pressed in a single operation in sizes up to one square meter; while for the manufacture of smaller objects the sheets are usually made 50 x 50 cm., especially when they are very thick.

It is thus seen that hardened paper is not only an electric insulator, but that in many cases it makes a good leather substitute or that it can be used instead of wood for the handles of flat-irons, kitchen utensils, etc. It has a very attractive appearance, and its low heat conductivity makes it particularly suitable for such purposes. But such an application would not be practical owing to the high cost of production of such articles, so that the principal field of application of the product has been for electrical purposes, where the matter of price is secondary to quality and care in manufacture.

Besides being turned out in the form of pressed sheets or plates, the material can also be wound into tubes for use in inductors and transformers, for placing around insulators for high tension transmission lines, etc., and such tubes can be made in all dimensions, from the smallest to the largest. A large number of such insulating tubes have been made for use with tensions up to 500,000 volts.

The method of manufacture of these tubes naturally is quite different from that used for pressed sheets. The layers cannot be tightly pressed together as they are being wound; and though numerous methods have been attempted it has not yet been found possible to make pressed tubes which could compare with the pressed sheet used for switchboards and the like.

On looking a little more closely at the problem, it will be seen that it is extremely difficult to obtain sufficiently intimate contact of the internal and external layers of a tube by pressure.

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* Translated from *Revue Generale des Matieres Plastiques* II, 383-387, June, 1926, by A. Papineau-Couture.

Small tubes, however, up to 50 mm. internal diameter, can be made in presses with suitable cylindrical or rectangular cores; but owing to the excessive pressure along the edges of the strip of paper, the superposed layers are inevitably damaged, with consequent falling off in the dielectric strength, so that these tubes cannot be used with high voltages. But in spite of this drawback tubes up to 1 meter in length can be made at a reasonable cost, which are quite satisfacory in many cases, especially as they retain their shape very well.

Raw Materials

The same procedure may be used for the impregnation of the paper with insulating material, whether sheets or tubes are to be made. The paper web may be either passed through a bath of the liquid insulating substance (for complete impregnation), or else coated on one side by means of a roll which is wetted with the solution. In either case the paper is dried by passing between or in contact with heated surfaces, and is cut into sheets of suitable size.

The first problem is the selection of the right grade of paper and of the proper impregnating material. It might quite naturally be thought that, as the paper is to be impregnated, it should be as porous as possible. Such a paper undoubtedly gives an insulator with good adhering power, quite suitable for many purposes; but it could not be used with high voltages. Extensive tests with different grades of paper have shown that the electric resistance, and even more so the dielectric strength, fall off as the absorbency of the paper increases.

It is also known that the electric resistance of an insulator cannot be improved by addition of another substance having a high dielectric strength. Proof of this is readily obtained from observing the dielectric strength of glass and vulcanized rubber sheets, taken both separately and together: the resistance of the two sheets together is not at all proportioned to the resistances of the two sheets taken separately, and frequently is lower than that of either one. Or again, electricity under a tension of 15,000 volts will not spark across an air gap of 10 mm.; but if a vulcanized rubber sheet 5 mm. thick be interposed sparking will take place, in spite of the fact that the vulcanized rubber has a dielectric strength of over 40,000 volts. The resistance of the air is therefore reduced even by addition of a much better insulator. Similar phenomena take place in a sheet of impregnated paper: the fibers which are incorporated into the insulating substance act as foreign bodies, in the same way as air bubbles in glass or fissures in marble, and cause a premature breaking down of the insulation.

As far as possible, an insulator should not be built up of components having different dielectric constants. If we use an absorbent paper, which is not considered as a very good dielectric owing to the porosity of the fibers, even though it be impregnated with the very best of insulators the finished product will have the same electrical defects as the raw paper itself.

A dense, hard paper, on the other hand, gives much better results. It should be quite free from foreign substances such as sizing, fillers, etc. Several German firms manufacture a high grade insulating paper, which is so strong and uniform that it can already be considered as a good insulator, even before impregnation.

The problem of selecting a suitable impregnating agent resolves itself into finding a substance having the same dielectric value as the paper. At the same time it must be a perfect insulator and have strong adhesive properties to bind the several layers of paper together. In this respect the synthetic resins, and more particularly bakelite, meet all requirements. Bakelite is obtained by condensation of formaldehyde (CH_2O) with phenol (C_6H_5OH) or cresol ($C_6H_4OHCH_3$), and, in its different forms, A, B, and C, it possesses all the properties which make it so eminently suitable for the manufacture of insulating papers.

In its final stage (bakelite C) it is insoluble, infusible, insulating and impermeable. In its intermediate stage (bakelite B) it can be applied in alcoholic solution in the form of an insulating lacquer. The solvent is evaporated from the impregnated paper, and under the action of pressure and heat the bakelite passes to the final stage C. Nearly all manufacturers of insulating paper use a synthetic resin as insulator. Moreover, its use is not limited to the impregnation of paper, numerous other products such as silk fabrics, wood, asbestos compositions, etc., being impregnated with it.

The impregnation of paper is carried out in two stages. The alcoholic solution of the resin is heated to 50° C. to increase its fluidity. After impregnation the paper is dried rapidly, with recovery of alcohol. An impregnating machine can turn out up to 400 kilos a day, two-thirds of the weight of the finished product being paper and one-third resin.

If the rolls over which the impregnated paper is passed become dirty, this will cause considerable trouble, and things are even worse if the paper sticks to the rolls owing to premature hardening of the resin, as it may cause the web to break. It is essential that the strip of paper should travel very evenly, and if it goes to one side it causes endless trouble. These various troubles can be overcome with a little experience, and in the German plants suitable means have been devised for effecting impregnation in the most perfect manner possible.

Manufacture of Pressed Sheets

The dried impregnated paper is cut into sheets on special tables of the size of the required sheets. Several sheets are then superposed and pressed between clean, smooth, metal sheets, which are coated with wax or grease to prevent the paper from sticking.

The hardening of the synthetic resin, and more particularly the transformation of bakelite B into bakelite C, is effected by the combined action of heat and pressure. This treatment first liquifies the bakelite and the excess is pressed out. In order to prevent the formation of air bubbles, the heat and pressure are applied progressively, and the latter may go as high as 50 kilos per sq. cm. (about 650 lb. per sq. in.).

The preparation of a sheet 10 mm. thick may take from one to two hours according to the nature of the insulating material used.

Presses with several compartments are used, and several sheets are placed in each compartment. After pressing, the sheets must be thoroughly dried to remove the last traces of water and alcohol, which would render machining much more difficult, as in the case of wet wood, and which would also reduce the strength and especially the dielectric power of the sheets.

The only really satisfactory procedure is to dry the sheet thoroughly before pressing; for the pressed sheets cannot be efficiently dried, as the moisture inside the sheet could not escape from the surface layer which has become hardened by pressure.

Sheets which are not uniformly pressed over their whole surface are warped and have bubbles in them.

Free phenols or cresols from the synthetic resins have a disastrous effect, as they prevent proper adhesion of the paper and insulator. Such plates are readily detected by their characteristic odor. Perfect plates should be perfectly odorless, even when heated to high temperatures.

The sheets are cut with saws operated at high speed. Rods can be produced by sawing the sheets into strips and turning the latter in a lathe; but the process is expensive and gives rise to considerable waste. Attempts have been made to produce such rods more cheaply by winding a sheet about a thin rod and then moulding, but the results obtained are not encouraging. The high cost of the rods obtained with the lathe is offset to some extent by their splendid appearance. They can easily be turned, take a very high polish, have an exceptionally fine grain structure like wood, and have a remarkably artistic appearance; but unfortunately the demand for cheapness and usefulness has no regard for beauty.

On the whole, the machining of these products demands some experience and is not as simple as in the case of wood and metal.

Drilling, for example, generally causes trouble at first. But it may be said that all machining, when properly carried out, gives good results, and the complaints of manufacturers who tried out new products ceased as soon as they followed the right procedure.

Manufacture of Tubes

The impregnated paper passes directly from the drier to the tube making machine, where it is wound tightly around a strong hollow metal core, of a diameter equal to the internal diameter of the tube, until the desired thickness has been obtained. The action of the hydraulic press is replaced by that of outer rolls which press the paper on to the core as it is being wound. Other means can be used to obtain the required effect. Both the pressing rolls and the central roll are heated to harden the resin. Of course this is much less effective than the action of the press in the preparation of sheets.

Pressure is exerted while the strips are being wound into tube form and while condensation of the resin takes place; but as it

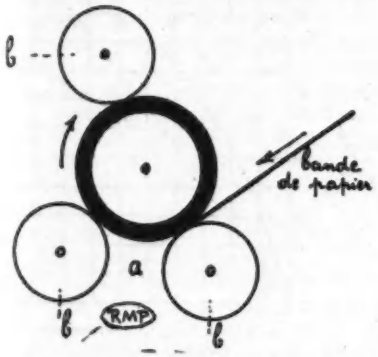


FIG. 1

occurs only at the points of contact of the rolls it cannot be continuous (as with sheets in a hydraulic press), and any given point on the wall of the tube is subjected to the action of the pressure only for a relatively short time. Perfect cohesion of the several layers, therefore, cannot be affected, nor can the condensation of the resin be brought to its final stage. It follows that the tube must subsequently be heated in an oven for days, and even weeks, in order to obtain relatively satisfactory results. Yet, even this treatment does not produce the perfect cohesion of the several layers required for optimum insulating properties, and the air is not driven out from between the layers.

The manufacture of the tubes is represented diagrammatically in Figure 1. The strip of paper is wound around core *a*, while the several rolls *b* press the paper against the core. The portion of paper which is in contact with any one of the pressing rolls is highly compressed and quite homogeneous; but as soon as it passes from under the roll its elasticity makes it expand and reabsorb air. As it passes under the next roll it is again compressed, to again expand and absorb air as it passes beyond. The process therefore resolves itself to alternate compression and releasing of the paper; the air, free phenol or residual solvent are not completely driven out, as in the case of sheets made in a hydraulic press, and they prevent the formation of a perfectly homogeneous mass.

No tube-winding apparatus has yet been devised to overcome this trouble, and though a large number of patents have been taken out in this connection they are all based on variations of the same principle.

The drawbacks mentioned above can be reduced to some extent by increasing the tension of the paper, but the extent to which this can be done is limited by the strength of the impregnated strip. Increasing the number of pressing rolls does not cause any appreciable improvement, the increase in pressure which they give being quite negligible as compared with the effects of a hydraulic press acting under high pressure.

Various methods have been tried of overcoming these difficulties. Impregnation has been carried out more carefully, in two and three stages, the strips have been dried thoroughly in vacuum to remove air as completely as possible, they have been pressed so as to incorporate the insulating material as thoroughly as possible into the paper, etc.; but all without success, as the solution of the problem lies in devising a satisfactory winding machine.

It is not to be wondered, therefore, that wound tubes do not have as high a dielectric strength as pressed sheets of the same thickness.

Tubes are wound with diameters of 5 to 15 cm. A tube-machine can turn out from two to five tubes an hour, according to the thickness required. Smaller tubes are moulded. These tubes, which are never more than 50 mm. in diameter nor 600 mm. long, are of inferior quality, as far as electrical properties are concerned. They are used only with low voltage and do not afford any protection against moisture or heat.

Electrical and Mechanical Properties

The quality of the final product naturally depends on those of the raw materials.

The paper should contain nothing detrimental to the stability of the cellulose. A special, well-sized and smooth paper possesses, when dry, satisfactory mechanical and electrical properties, but it is quite sensitive to the action of moisture, which greatly reduces its strength. The moisture content of a paper has a considerable effect on its mechanical and electrical properties.

According to Schwaiger a paper 0.46 mm. thick and containing 10 per cent moisture had a dielectric strength of 5,700 volts, while with 95 per cent moisture the resistance fell to 1,800 volts, a drop of 60 per cent from its original value. (The results probably refer to atmospheric humidities of 10 and 95 per cent, respectively, and not to the actual moisture contents of the paper itself.—Translator.) The mechanical strength of the paper also falls considerably with increase in moisture content. The dielectric constant of paper (wood cellulose) is 2.

This variation in the strength of paper with variations in atmospheric humidity is eliminated when the paper is impregnated with synthetic resin, and particularly with bakelite in its final state of condensation. But in order that the finished product may exhibit the properties of dry paper it is essential that all water be driven out of the sheet before the resin is converted into its final condition.

Pure bakelite C is a solid, insoluble and infusible product, with a specific gravity of 1.25. It remains unchanged at temperatures up to 300° c., and is not attacked by most acids, except concentrated nitric and sulphuric acids. It has a dielectric constant of 6 to 8 and resistance to sparking of 23,000 volts per mm., while its resistivity goes as high as 900 million megohms.

Its most important property from the standpoint of its application in the electrical industry is its dielectric strength. In comparing it with other insulating materials the methods used must be very exactly defined. The source and nature of the current, rate of increase in voltage, time of charging, shape of electrodes, and many other factors affect the results. The German Association of Electrical Engineers has fixed the conditions under which such tests should be carried out, so that the conditions used in Germany are known definitely; but there is no uniformity in the results obtained elsewhere, and the conditions of the tests are not always given in all the detail that would be desirable.

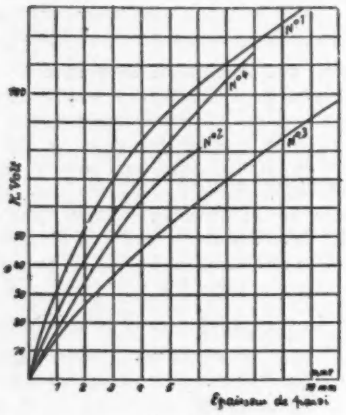
The quality of the impregnated paper depends on the uniformity of the resin coating and on the care with which it was applied. Bultemann has given a perfect reproduction of the formation of the layer of resin and of the intimate union between paper and synthetic resin by means of microphotographs of transverse sections of the impregnated paper. Some very instructive photographs of both satisfactory and defective materials can also be found in the publications of the Brown Boveri Company.

Good results were also obtained by using sawdust and asbestos instead of paper. According to Schwaiger plates 3 to 4 mm.

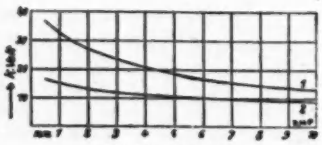
thick, prepared in this manner, when tested with a 50-cycle alternating current showed a dielectric strength of 50,000 to 70,000 volts per cm. (asbestos composition), and of 55,000 to 60,000 volts per cm. (sawdust compn.), and these figures remained unchanged after the material had been allowed to stand for 24 hours in cold water. On the other hand, when the temperature of the water was raised from 15° to 60° C. the break-down voltage dropped considerably.

Plates from paper impregnated with shellac instead of synthetic resin have a dielectric strength about 6 per cent lower; but whereas bakelite-impregnated plates can stand a temperature of up to 300° C., shellac-impregnated plates begin to soften below 100° C.

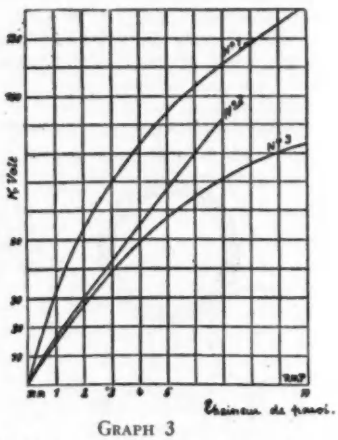
Graph 1 shows the effective dielectric strength of a German



GRAPH 1



GRAPH 2



GRAPH 3

paper insulator, "Pertinax," put out by Meirowky and Co. Curves 1 and 2 give the values for plates and tubes, respectively, while Curve 3 (for porcelain, according to Friese) is given for the sake of comparison. This material was tested in oil with a 50-cycle alternating current, and the voltage was increased every 15 seconds.

Graph 2 shows the specific dielectric strength of "Pertinax" and of porcelain per mm. of thickness; while Graph 3 shows the effect of temperature and the differences according as the tests are carried out in air or in oil. When the temperature rises from 15° to 100° C. the dielectric strength drops about 35 per cent. Curve 1 is for oil at 15° C., curve 2 for air at 15° C., and curve 3 for oil at 100° C.

The values given are for charges acting perpendicularly to the surface of the plates or tubes. This is of importance, as the properties of these materials are not always the same in all directions. Other electrical properties of insulators are given in the following table:

Material	Dielectric Strength K.V. per mm.	Dielectric Constant	Resistivity in Megohms
Bakelite—Impregnated Paper	32	4-5	40,000-100,000
Vulcanized Rubber	15-30	2-3	1,000,000
Porcelain	10-15	4.5-6	up to 2,000,000
Glass	15	3-9	1,000

Examination of the physical properties of hardened impregnated papers gave very satisfactory results. The strength of the tubes in the direction of their axis was over 1,000 kilos per sq. cm., while the crushing strength of plates in a direction perpendicular to their surface was over 3,000 kilos. They may be subjected to temperatures of up to 180° C. without causing trouble, and they are unaffected by oils and fats, as well as by most acids. Other mechanical properties of this and other insulators are given in the following table:—

Material	Specific Gravity	Bending Strength Kg. per sq. cm.	Resistance to Shock
Bakelite—Impregnated Paper	1.15-1.4	1,400	28 cm. kg./sq. cm.
Vulcanized Rubber	1.15-2	350-1,000	4.2-23 cm. kg./sq. cm.
Porcelain	3.2 -2.5	400- 500	5.6-6.4 cm. kg./sq. cm.

New Members of Technical Association

Most recent additions to the membership of the Technical Association of the Pulp and Paper Industry include:

W. M. Booth, 526 University Building, Syracuse, N. Y.

A. A. Coffin, West Virginia Pulp and Paper Company, 604 West Thirty-seventh Street, New York, N. Y.

R. C. Griffin, Arthur D. Little, Inc., 30 Charles River Road, Cambridge, Mass.

Gerald Haywood, West Virginia Pulp and Paper Company, 604 West Thirty-seventh Street, New York, N. Y.

K. E. Luger, Aluminum Company of America, 120 Broadway, New York, N. Y.

F. H. Masselink, 119 West Vine Street, Kalamazoo, Mich.

A. W. Uesch, Falls Manufacturing Company, Oconto Falls, Wis.

Arthur Pollak, West Virginia Pulp and Paper Company, 604 West Thirty-seventh Street, New York, N. Y.

R. J. Quinn, Mathieson Alkali Works, Inc., 250 Park Ave., New York, N. Y.

O. W. A. Rodowski, Louisiana Pulp and Paper Company, Bastrop, La.

J. E. Whitfield, Brown Paper Mill Company, Inc., Monroe, La.

H. D. Yoder, Penberthy Injector Company, 1242 Holden Avenue, Detroit, Mich.

Pulp Wood Cutting Peeling Season Ending

The season for peeling balsam and poplar pulp wood is about over, and a good cordage has been taken out by the settlers and farmers in northern Ontario, as well as some other parts of the province. It is gratifying to find that the pulp wood market is getting a little firmer after many months. News print mills have been busy and the pulp market has continued very fair, which has resulted in a better demand for wood. Then Ontario has to be thankful that so far this season the forest fires have not created any great damage, far less than in other periods. A number of companies are getting ready for logging in lumber and pulpwood and already men have entered the bush for preliminary work. American concerns, which have pulp wood offices at Fort William, Port Arthur, and Sault Ste Marie, are busy shipping wood to United States points by steamer and barge and transportation conditions this year have been good. Some organizations will use more wood than last year; this is interpreted as being an omen that the future of the paper business is regarded as promising.

An Interesting and Attractive Booklet

"Show Your Colors" is an interesting and attractive booklet just issued by S. F. Bowser & Co., Inc., of Fort Wayne, Ind. This work, which is profusely illustrated, in colors, contains much valuable information regarding the Bowser Fountain of Illuminated Oil.

Removal of Condensate from the Driers*

Owing to the steady increase in speed of all types of paper machines, the question of the most efficient means for removing the condensation from the driers has become of great importance. On all high-speed machines it has been conceded the best practice to employ dippers for this work, using a siphon pipe only for the slower speed paper and board machines.

In order to solve this problem intelligently, our engineering department made a number of exhaustive tests with various forms of dippers under different conditions, and while we do not consider the data obtained of any great value, we feel that it has enabled us to draw accurate conclusions as to the best methods for obtaining maximum efficiency from the drying cylinders.

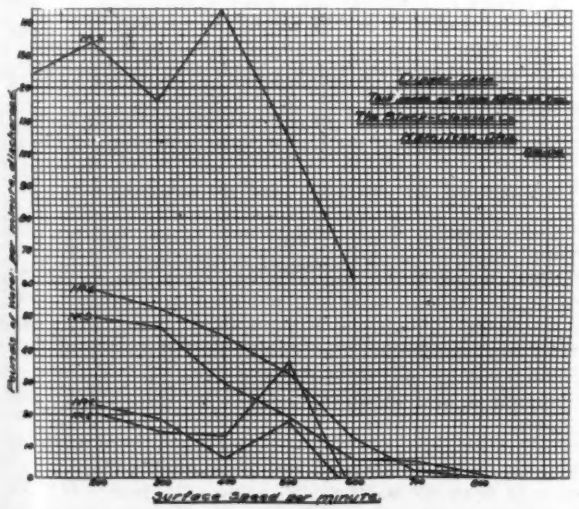
In Making the Tests

In making these tests we used a standard cast-iron dryer, 48 inches in diameter by 96 inches face, one end of which was left open for observation, in order to get accurate information as to the amount of water picked up and carried around the surface of the drier in the form of a film. This was found to begin to form at 400 feet per minute and gradually increased in thickness, until at a maximum speed of 1000 feet per minute, 0.069 inches in thickness, or 73 pounds of water was evenly distributed around the surface of the drier. It is very apparent that this film of water acts as an insulator and retards the passage of heat units through to the sheet.

The only way that this film could be broken mechanically would be by the employment of a scraper or doctor, extending across the entire surface of the drier and working in connection with a siphon pipe. This, however, we consider impracticable, owing to the difficulty of designing a flexible scraper strong enough to be practicable to maintain close adjustment: and to stand the heavy strains which would be encountered at high speeds.

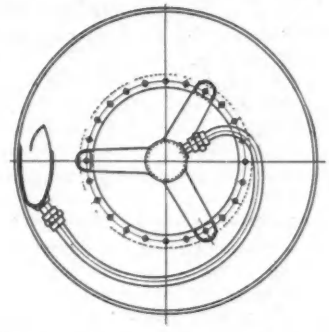
Conditions Carefully Considered

After careful consideration of these conditions, and the uncertain performances of the most approved forms of dippers

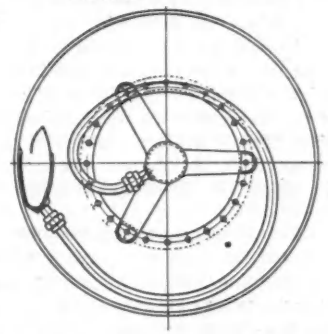


(see following tests), we have come to the conclusion that the problem is best solved by discarding the dipper, with or without scrapers, and using instead a properly proportioned siphon pipe in connection with a well-designed circulating system of steam, which will automatically remove all condensation and air, and for high speeds, if allowed to carry a few degrees of superheat, will prevent the formation of a portion of the objectionable film of water by means of re-evaporation, resulting in higher efficiency from the drying surface, and a minimum steam consumption per pound of paper dried.

Referring to the tests, we think that the erratic work of the

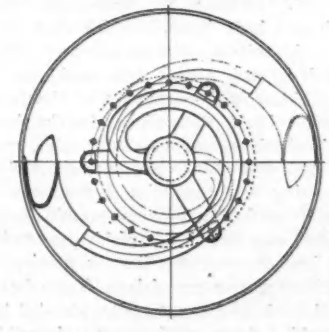


Test No. 1. Made with Dipper As Shown. Scraper Across Face Of Dryer. 1-Discharge Pipe From Scraper 4" Diameter.



Test No. 2. Made With Dipper As Shown. Scraper Across Face Of Dryer. 1-Discharge Pipe From Scraper 4" Diameter.

Test No. 3. Same As Test No. 2. Except That 2-4" Diameter Discharge Pipes From Scraper Were Used.



Test No. 4. Made With Double Dipper As Shown. 2-Scrapers Across Face Of Dryer. Each Connected To Centre 3" Diameter Discharge Pipe. By A 3" Diameter Pipe From Each Scraper.

Test No. 5. Same As Test No. 4. Exception That Scrapers Were Removed. Water Only The Plain Dipper At Either End.

various types of dippers was undoubtedly due to the pockets of air which accumulated in the discharge pipes. A balanced, double-arm dipper of open-trough construction, without scrapers, would, in our opinion, be the most efficient at high speeds.

The tests were started with a segment of water in the dryer 4" deep. This was maintained by adding water during the duration of the tests.

* The "B-C" *Messenger*, Black, Clawson Company, Hamilton Ohio.

Metering Slush Paper Stock*

In order to know how much of any one stock is being used in the paper furnish, it is necessary either to have the stock in lap form, test it for moisture, then weigh it and thus compute the actual weight of dry pulp or when the pulp is in slush form, it is necessary to regulate this slush stock to a uniform consistency and then have a means of metering it.

This latter method is the one which the Trimbey Automatic Consistency Regulator and the Trimbey and Tibbitts Proportioning and Metering System apply.

The Trimbey Automatic Consistency Regulator is a device, by means of which the stock can be held at a uniform consistency. Then it is only necessary to have a means of metering this slush pulp to have a record of the stock used. To date our experience is somewhat limited but it is enough to prove that they are accurate.

At the Escanaba Paper Company the stuff box ahead of the paper machines was removed and a Proportioning and Metering System installed in its place on each paper machine. At the groundwood slush tank and the sulphite slush tank Consistency Regulators were installed, in connection with the pumps throwing these stocks to the Mixers, to control the density. The Proportioning and Metering System consists of a number of meters driven by one motor, or from the paper machine line shaft, so that they are all driven in unison, the connecting gears being so arranged that the proportions of the mixture can be set and changed as desired. Then as these meters revolve, each keeps a record of the contact of the internal and external layers of a tube by pressure. it is an easy matter to compute the weight of stock metered. This arrangement has resulted in large savings in power and labor as well as improved formation and weight control and color control at this mill, as is shown by the copy of their letter as follows:

ESCANABA PAPER COMPANY
Escanaba, Mich.
January 27, 1926.

"Trimbey Machine Works,
Glens Falls, New York.

Gentlemen:—Replying to your recent inquiry regarding our satisfaction with the Trimbey and Tibbitts Continuous Mixing Process, which was installed at the Escanaba Paper Company's Mill, we have this to say: You may recall that, unlike other systems which you have heretofore installed, we desired to install this system in quite a different way and had it arranged and are still using it in such a way, as to make unnecessary the use of stuff chests either in the basement of the beater room or on the paper machine itself. Therefore, the Consistency Regulators were located in the beater room closely adjacent to the groundwood storage tank and also to the tank containing sulphite pulp, while the metering and regulating system was located in the machine room (one for each paper machine), arranged to discharge the mixed paper stock of sulphite, groundwood, alum and color directly into the stream of stock moving to the machine fan pump. These meters are driven from the paper machines and are located at the point ordinarily occupied by the stuff box. As a result, machine chests, stuff pumps and stuff boxes have been entirely eliminated, our only storage being the groundwood tank and the sulphite pulp tank.

We desire to say that, aside from the additional saving in power which has amounted, in our case to nearly 450 horse power, there is an additional saving in maintenance over and above the previous installation which we had. There is a remarkable improvement in our ability to run the paper close to weight, and the color regulation also leaves nothing to be desired and quite unexpectedly, the formation of the sheet has been improved. The system in general is operating to our entire satisfaction. A few minor changes had to be made in piping after the installation but we now feel that the whole system is working about as well as the most exacting could require.

This leaves little more for us to say to you other than the fact that we heartily recommend the arrangement, such as we have, to others seeking saving in maintenance cost, in labor, in power and in floor space; also to those desiring paper run more closely to weight with closer color regulation, greater strength and improved formation. We have practically eliminated the beater room and the labor saving has been quite surprising.

Yours very truly,
ESCANABA PAPER COMPANY,
Jos. H. Slater, Manager."

Another installation at the Wayagamack News, Ltd., was checked against sulphite pulp purchased and showed the following results. During two weeks when the test was made, 437 tons of sulphite were used by weight and 436 tons by meter readings. We would hate to have to prove which was correct but they are so close that the difference is negligible and proves that the meter is accurate.

These two cases demonstrate that slush stock is being metered accurately and at no additional expense to the mill where these machines are being used. When a machine has proved itself accurate in one case it is then only a case of application to obtain similar results in other cases. These meters can be fitted to a large number of cases where it is now hard to get a check on slush pulp used. But each case is an individual engineering problem by itself. It is a case of uniform stock being pumped continuously to and through the meter. The meter itself is a four bladed rotor revolving in a machined barrel having one side open for filling from a supply vat. As the rotor revolves carrying the stock around and emptying at the opposite side, a revolution counter keeps a record of the number of revolutions made. It is a simple device, requires little power and is accurate.

* From Pulp and Paper Profits (Cost Association of the Paper Industry).

Waxed Paper Trade Custom Revised

At a recent meeting of the American Waxed Paper Association, it was decided to revise the Association's trade customs so as to provide that waxed paper bread wrapper rolls would hereafter be stocked in widths varying by one-half inch only, the object being to reduce inventories and make it possible to sell standard widths at the lowest possible price consistent with reasonable profit over the cost of production.

This action is in full accord with efforts by the Division of Simplified Practice of the United States Department of Commerce to simplify or standardize production units in the interests of the manufacturer, the distributor, and the consumer alike.

River Raisin Paper Co. Issues Bonds

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., August 23, 1926.—The River Raisin Paper Company, Monroe, is offering $1,600,000 six per cent first mortgage bonds, with which to refund the unpaid portion of $2,200,000 eight per cent bonds. The company's balance sheet on June 30, 1926, showed a total of $6,080,628.60. The total value of the mill property is over $5,000,000 or $3,125 for every $1,000 issued in bonds.

New Westminster Paper Mills Co.

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., August 23, 1926.—The New Westminster Paper Mills Company, of New Westminister, B. C., has taken over the patent rights of a new process for the manufacture of paper napkins and towels, the machinery for which is already on its way from the east, and will cost $250,000. The company was organized three years ago, and is planning a daily output of 2,000,000 napkins and towels.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

Clarence J. West, Chairman

Paper Machinery

New Dewatering Device for Pulps. E. Belani. Wochbl. Paperfabr. 57, 70-74 (Jan. 16, 1926). The Mosebach press is illustrated and described. Its use as a dewatering device in pulp manufacture is discussed. The content of the pulp from these spiral presses is 50-60 per cent, and the cost and operation of such a machine is less than half that of a longitudinal wire dewatering machine.—J.L.P.

Dewatering Paper Stock. A. Klein. Zellstoff U. Papier 5, 481 (Dec. 1925). Figures taken from American mills (news print) are tabulated to show the quantity of water removed from different parts of the paper machine.—J.L.P.

Draining Water From the Paper Machine Wire. V. Antoine. Eng. pat. 241,069. Water is carried away from the wire by using wipers contacting with the underside of the wire at its arc of wrapping around the upper couch roll, which is set back somewhat from the lower couch. The wipers may comprise flexible rubber blades bevelled to an edge; or brushes or rotating slats or blades may be used. The wipers may be separately adjustable or linked together. They may be mounted in a suction box having flexible edges making joint with the wire on the roll. The wrap of the wire on the roll may be increased by setting the couch rolls lower than the table rolls.—A. P.C.

Watermarking Roll. Raymond de Montgolfier. Fr. pat. 597,983. Shaded watermarks are obtained by means of a watermarking roll on which the designs are in relief instead of being engraved. This allows of changing the watermark when desired, without reducing the diameter of the roll, the latter being merely turned down till the design is completely removed, and a new design being built up by any suitable process. The roll can be put in the place of one of top press rolls, at the smoothing press, between different sections of the driers, etc.—A.P.-C.

Clothing of the Paper Machine. John Nuttall. World's Paper Trade Rev. 85, 260-264, (Jan. 22, 1926). Discussion of the care of wires, jackets and press felts.—A. P.-C.

Paper Machine. J. A. Device. Eng. pat. 243,637. To prevent the wire from cutting into the wooden tops of the suction boxes, a slow lateral to and fro motion is imparted to the wire by means of a roll, one bearing of which is pivoted while the other is mounted to slide slowly back and forth in a standard. —A. P.-C.

Suction Rolls for Paper Machines. St. Anne's Board Mill Co., Ltd., and R. B. Heys. In suction rolls having longitudinal channels draining away to either one or both ends of the cylinder, a gutter or gutters are provided in each channel to catch any liquid that may be left in the channel after it has passed the suction outlet in the end cover. The gutters are arranged so that they are inclined towards the outlet at the bottom position of their rotation. The end covers are provided with two discharge outlets. Through the second the liquid caught in the gutters may be drained away by gravity.—A. P.-C.

Boivin Stock Regulator. Paper Trade J. 82, No. 5, 65 (Feb. 4, 1926). Regulation is obtained by a conical shaped gate above which is a float. The gate is suspended in the outlet of a compartment in which the level of the stock is maintained constant by an adjustable dam and overflow. If the consistency of the stock increases, pressure is exerted on the float and cone, causing a downward movement, thus restricting the area of the outlet and a less volume of heavy stock will pass. If the stock becomes thin, its action on the float will slightly raise the cone, increasing the area and permitting a larger volume of thinner stock to pass, thus maintaining at all times a uniform weight of sheet.—A. P.-C.

Shower Pipe for Paper Machines. R. S. Clarke assignor to Bird Machine Co. U. S. pat. 1,522,594. Sept, 8, 1925. The pipe is provided with a series of opening which are oval in form, the smaller end of each opening being designed to be open at all times so as to let the spray water pass when the machine is in operation. Extending lengthwise of the pipe is a rod mounted for endwise reciprocation in suitable guides. Mounted adjacent each of the openings and designed to be moved into operative relation therewith by the rod is a combined closure and deflector. The closure element takes the form of a curved plate which conforms with the outer face of the pipe and is made sufficiently long to give a fair bearing on the pipe. It extends forward to such an extent that it overlaps the rear larger portion of the opening in the pipe, but leaves the smaller end of the opening uncovered. Extending outward from the forward portion of the closure element is a deflector plate set at an angle so that water passing from the small end of the opening contacts with the same and is spread out, so that the spread jets together form in effect a sheet spray from one end of the pipe to the other. When it becomes necessary to clean the openings, the rod is shifted longitudinally, carrying the combined closure and deflector elements with it and exposing the full area of the openings: the water surges through and carries out any extraneous matter lodged in the opening.—A. P.-C.

Flow-Box Rectifier for Paper Machines. J. O. Mason and E. B. Wardle, assignor to Laurentide Co., Ltd., U. S. pat. 1,552,-629, Sept. 8, 1925. A number of plates are placed within the flow box adjacent the spout or outlet of the box. The length of the plate is in the direction of the flow to provide a long surface for steadying and regulating the flow of stock on to the wire. The plates are made of thin material and are spaced at even intervals across the box. The edges of the plates nearest the source of the flow are rounded off to prevent any of the stock adhering to this edge, and the edges nearest the delivery end of the box are bevelled to prevent eddying of the flow. The plates are held in position by means of concealed attachments and may be attached to the front or rear of the spout or delivery end. The plates are mounted on round bars with suitable spacers, the whole being securely fixed to the front or back of the spout so that the rectifier may be easily removed for cleaning or repairing. The attaching bars and bolts being concealed allow the flow to be easy and steady, there being no exposed fixings which will retard the flow, cause eddying, etc.—A. P.-C.

Process and Device for Cleaning the Wire and Felt of a Paper Machine. A. Benedello. Ger. pat. 420,831. Papierfabr. 23, 772 (Nov. 29, 1925). Water spray pipes are so arranged to clean the wire and felt of a paper machine that they operate automatically depending on the speed of the machine.—J. L. P.

Calender Doctor. F. B. Dehn. Eng. pat. 240,096. A doctor for calender rolls comprises a cleaning pad of felt or other suitable material held between spring clips on a bar mounted by bolts on arms pivoted to the frame of the stack. Springs press the cleaning pad against the calender roll and a catch engaging a projection on the frame can be used to hold the doctor in the inoperative position.—A. P.-C.

Elimination of White Water Losses in Paper Mills With Oliver Save-Alls. Paper Industry 7, 1433-1434 (Dec. 1925); Pulp and Paper 24, 31-33 (Jan. 14, 1926). Report outlining the most salient features and recoveries effected by the Oliver save-all installation at the Camas, Washington, mill of the Crown

Willamette Paper Co., showing that it is capable of reducing white water losses to less than 1 per cent of the fiber sent to the paper machine and that it overcomes all difficulties attendant on the mixing of colors and grades of stock. It is claimed to have high capacity and recovery and low power consumption, and to require only nominal attention and repairs.—A. P.-C.

Combined Paper Carrier and Gauge. R. F. Tavel. U. S. pat. 1,549,627, Aug. 11, 1925. The machine which is particularly suitable for use in conjunction with a paper punch, consists of a paper carrier which can be adjusted both longitudinally and transversely so that it will always present the paper to the action of the punch (or other instrument) in an absolutely accurate position. The patent covers mechanical features of construction whereby the adjustment is effected easily and accurately.—A. P.-C.

Special Machinery

Slitter and Rewinder. G. Laroche assignor to Societe Anonyme de la Papeterie de Nanterre. U. S. pat. 1,539,748, May 26, 1925. This machine is substantially characterized by a smooth surfaced cylinder composed of removable elementary cylinders, of different widths, some of them of very hard metal, the others being made of cast iron or other metal of less value so as to always present, in the cutting plane, a cylinder made of hard metal, whatever may be the widths in which the machine roll is slit. To this cylinder is imparted both a rapid rotary motion and a very slow reciprocating longitudinal motion, the purpose of the latter being to avoid that the cutters should always be in contact with the same points of the roll.—A. P.-C.

Machine for Cutting Packages of Interfolded Tissue Paper. L. A. Straubel. U. S. pat. 1,546,808 July 21, 1925. The machine is intended to cut up into packages suitable for use as toilet paper or paper towels, etc., long bundles of interfolded paper produced from very wide sheets of paper. The paper carrier comprises end spider members keyed to a common shaft journaled in suitable standards. The spiders are provided with regularly spaced outwardly projecting rectangular portions, corresponding portions of the two spiders being connected by means of channel irons, on each of which is rigidly secured a series of aligned stock-receiving pockets. Adjacent edges of the jaws of neighboring pockets are parallel and close together, so as to act as guides for the rotary cutters which divide the long bundles into commercial size packages. This allows of using relatively thin cutters, and of securing clean cut instead of frayed edges.—A. P.-C.

Paper Interfolding Machine. L. A. Straubel. U. S. pat. 1,546,809. July 21, 1925. This is an improvement on U. S. pat. 1,423,276 of July 19, 1922, providing mechanical features for operating the several holding or presser flaps and tucking blades in a regular manner by extremely simple mechanism having few parts and formed so that all the parts are rugged and reliable. An improved form of holder plates for the folded paper is provided, which are so constructed that the paper is securely held against shifting, even at the time during which the fold is made, thus insuring the production of a package of uniform width although formed of interfolded separate sheets. A combination of long and short presser flaps is employed, the former to hold the folded portion of the paper immediately after tucking and the latter to hold an intermediate portion of the folded paper to prevent disengagement of the last or loose sheet, and to thus keep such sheet clear of the tucking blades under all conditions.—A. P.-C.

Paper Cutters and Their Operation. F. Hoyer. Papierfabr. 23, 762-765 (Nov. 29, 1925). A brief discussion of various kinds of paper cutters.—J. L. P.

Machine for Coating, Glazing, or Otherwise Treating Paper. E. Pohl. U. S. pat. 1,539,952, June 2, 1925. Two large rolls are mounted one over the other. A smaller hollow roll is mounted over the top roll, and a similar one under the lower one. The smaller rolls can be steamheated if required. With each of the smaller rolls there cooperates a coating device for applying melted paraffin etc., consisting of a metal roll dipping in a bath of the coating material and of two intermediate, felt covered, transfer rolls which distribute the material uniformly over the coating roll. The paper roll is supported on brackets on the frame of the machine, and is wound on a mandrel also supported on brackets on the frame of the machine. Either one or both sides of the paper may be coated on the machine. If only one side is coated, two rolls can be coated simultaneously.—A. P.-C.

Apparatus for Turning Paper. R. K. Matlack. U. S. pat. 1,541,651, June 9, 1925. The purpose of the apparatus is to turn paper sheets end for end and side for side to allow of their proper inspection in order to detect blemishes. This is accomplished by carrying the sheets (after they have passed first inspection station) upwards on endless tapes, and delivering them on a slanting, stationary platform, near the top of which is an adjustable stop bar, which may be placed according to the size of the sheets. As the paper strikes this bar, the rebound has a tendency to feed the paper in the reverse direction, and it falls on another set of tapes passing around a large roll which reverse both the side and the end of the paper, and which deliver it on to another set of tapes which travel past the second inspection station. The device can also be used for reversing sheets of paper between pairs of calendering rolls. As the sheets are both reversed and turned end for end this prevents the calendering rolls from rolling the paper in one direction only. By reversing the paper between the rolls, a better grade of paper is obtained.—A. P.-C.

Folding Paper. T. E. Pythian. Eng. pat. 239,644. In a rotary folding mechanism comprising tucker blades mounted on spindles carried by a rotating member and adapted to fold the sheet between rollers, the tucker blades are operated by means of a rotating cam member having a radial slot which engages rollers on which are arms attached to spindles and parallel to the blades. Movement of the blades relative to the shaft is normally prevented by a ring with which the rollers engage, the ring being cut away to allow the devices to operate. The cam is driven from the shaft through gears.—A. P.-C.

Counting Paper Sheets. A. E. Ryberg. Eng. pat. 241,810. Paper sheets are stacked so that the edge of the pile is in contact with a slanting plate, and are counted by running a feeler along the inclined face of the stack. The vibration of the feeler due to its rescent from one sheet to the next actuate a counter, through an electromagnet. The counter is provided with signalling devices and zeroizing means operated at the desired points in the count. The entire operation of running the feeler along, stopping it at the desired point, inserting it between the sheets and displacing the batch counted may be performed mechanically and automatically.—A. P.-C.

The Use of Rotating for Silk Papers. G. Strecker. Wochbl. Paperfabr. 57, 18-19 (Jan. 2, 1926). Descriptive.—J. L. P.

Machine for Coating, Drying and Cutting Paper. A. Brechbiehl. Fr. pat. 591881. A coating of color is applied to one side of a web of paper by passing through a pair of rolls, the lower one of which dips in a color solution tank, while the pressure of the upper one is adjustable. The paper passes directly over a heating element which dries it before the moisture has time to penetrate into the sheet and destroy the finish. From there it passes over a hot polished metal plate which restores the finish if it was impaired, and is then either wound or cut into sheets. The arrangement of the different parts of the machine is such that the machine is only about a quarter of the length of machine usually required to do the same work, and one man can attend to two or three machines.—A. P.-C.

Apparatus for Making Crinkled Paper. N. M. Goodlett. U. S. pat. 1,543,432, June 23, 1925. Adherence of the paper against the crinkling or creping roll is obtained partly by moistening the paper, and partly by means of air or steam pressure. The latter may be exerted either by means of a pressure chamber outside the roll, extending partly round the latter and in close proximity to the creping doctor, or else by means of a suction box inside the roll, also extending right close to the doctor.—A. P.-C.

Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

Published Balance Sheets and Window Dressing*

By L. R. Dicksee, M. Com., F.C.A.

There are many Balance Sheets which are open to criticism, but there are also many criticisms which arise from ignorance or misunderstanding on the part of the critic. Professor Dicksee sets out the information which a Balance Sheet may be reasonably expected to give to the shareholder.

I make no apology for selecting for the subject of my talk to you this evening "Published Balance Sheets and Window Dressing", for I think it is obvious that all those who are in any way concerned with bookkeeping realize that the Balance Sheet is, so to speak, the ultimate goal towards which all their efforts aim. If we have wrong ideas in connection with Balance Sheets, there is perhaps not very much use in having right ideas concerning the various steps that have led up to them. As a matter of fact, Published Balance Sheets are issued primarily for the information of shareholders in the companies concerned. The average shareholder certainly knows less about bookkeeping and Balance Sheets than any of your members are likely to do. The result is that we sometimes find that Balance Sheets are criticized from an entirely mistaken standpoint, and one of the things I want to try to clear up with you this evening is as to what we may reasonably expect to get out of a Published Balance Sheet, and incidentally, of course, what we are not likely to find there, and therefore, what it is waste of time to look for.

First of all, I am going to draw your attention to the fact, that a balance sheet is not a mere statement of affairs. It does not profess to be a valuation of all the possessions of the company on the one hand, set off against its liabilities and various kinds of obligations on the other. If we were to attempt year by year to revalue all the assets of a company, even supposing we succeeded in agreeing what values ought to be placed upon the various assets, the result would be to introduce into our balance sheet a number of alterations of values which, as a matter of bookkeeping, would have to be treated somehow as profits or losses, but which would have nothing whatever to do with the actual business of the company, and would confuse any ideas which we might otherwise be able to form as to the success with which the company had been carried on.

A balance sheet is merely a summary of the balances that remain in the ledger after the books have been closed by preparing and completing a proper Revenue Account. I use the term "Revenue Account" as being a shorter description than the more usual ones, "Trading Account" and "Profit and Loss Account," which taken together may be said to constitute the Revenue Account. If we agree that the Balance Sheet is a summary of the balances that remain after we have completed the Revenue Account, it follows that if anything has been wrongly excluded from the Revenue Account on either side it necessarily and inevitably comes into the Balance Sheet, and that, conversely, anything which we may have wrongly included in the Revenue Account will necessarily and inevitably be omitted from the Balance Sheet. The items that appear in the one do not appear in the other and vice versa. From this it follows that we can get a very much better insight into a Balance Sheet and form a much more intelligent criticism of it if we have before us a full Revenue Account as well as the Balance Sheet, because it is always easier to discover an item which is wrongly placed than to discover one which is merely absent.

An Overstressed Argument

Our first criticism, therefore, of what we might call the usual way of publishing Balance Sheets I think may take the form of saying that it is not satisfactory to submit balance sheets without at the same time submitting the Revenue Accounts which are the complement of them. The stock answer to that criticism is that one cannot disclose the whole of the contents of the Revenue Account without giving information that may be made use of by competitors. There is no doubt something in that argument, but it is very much over-stressed. Certainly so far as there is anything in it it might be met by suppressing the Trading Account, thus still leaving us with the information that a Profit and Loss Account supplies.

The next point which I want to suggest to you is that Published Balance Sheets are never complete lists of those ledger balances which come into the Balance Sheet because they have been excluded from the Revenue Account. The Balance Sheet is always a summary of those balances. Hence it follows that its value to anyone seeking information must depend to a very large extent upon the way in which that summarization has been performed. There will be nothing lost from the point of view of the ordinary shareholder if similar items are grouped together under a common heading, but there will be a great deal lost if the summarization is overdone, and if as a result wholly dissimilar items are grouped together under one heading without any indication of their relative importance or magnitude. A very large number of Balance Sheets, I think, are open to criticism upon the ground that they are too much summarized to provide a reasonable disclosure of the position. In particular the Balance Sheet must be unsatisfactory if it fails to distinguish quite clearly between what we might call "fixed" items and "floating" items.

Fixed and Floating Items

By that term, "fixed" items, I mean those which in the ordinary course of events are not continually changing, and by "floating" items I mean those which in the ordinary course of events are

*From The Accountant.

continually in a state of flux. Fixed items normally consist, on the one hand, of the capital of the undertaking, and debenture debt that it may have and any undivided profits which it may not be intended to divide in the near future—that is to say, those liabilities the payment of which has not to be considered, at least for the time being. They are more or less permanent liabilities. Floating liabilities, on the other hand, are those which in the ordinary course of business would fall due for payment at more or less fixed dates in the near future, and the payment of which must be provided for if the company is going to continue in business.

Taking the other side of the Balance Sheet, the fixed assets are those which in a broad sense represent the equipment of the undertaking, the possessions which it owns with the object of continuing to hold them in their existing form and to use them as a means directly or indirectly of making its profits. They are held for use. The floating items on the other hand, apart from cash balances, are those items which in the ordinary course of business it is the aim of the company to turn into money with all convenient speed, making a profit in the process. It is clear, therefore, that the due payment of the floating liabilities can only be provided for in a satisfactory way out of the liquidation of the floating assets, and that the continued success of the business—we might even say, the possibility of its continuing at all—is dependent upon its ability to turn those floating assets into cash sufficiently quickly to provide itself with the cash that is required to pay the floating liabilities.

Should Be No Uncertainty

It is therefore, of paramount importance that every Balance Sheet, however summarized, it may be, should be so framed that there is no uncertainty as to which are fixed items and which are floating items. Otherwise we can form no idea of whether the concern will be able to pay its debts as they fall due or not. Moreover, because a company's fixed assets are not intended for sale or for conversion into money, but are intended for use, their precise value at any given moment of time is comparatively speaking unimportant so long as we are satisfied that there will always be sufficient floating assets to pay the floating liabilities as they fall due. Accordingly, the way is left clear for us to deal with the fixed assets in what, for other reasons, is by far the most convenient way—that is to say, to treat them rather as outlays which affect profits only in the sense that probably they will not forever continue to be equally useful as equipment, and therefore, will from time to time require to be replaced by others to perform that function. They represent outlay to secure the temporary purpose of providing the necessary equipment, and accordingly the cost of them must be treated as a working expense chargeable against the profits of the undertaking during the time that they are in use. If it is treated in any other way, the profits during that time will be overstated.

BALANCE SHEET—DECEMBER 31, 1925

LIABILITIES

Share Capital (100,000 Shares of $1 each)	$	$100,000.00
Reserve Fund		20,000.00
Sundry Creditors		24,000.00
Profit and Loss Account—		
Balance from 1924	18,750.00	
Dividends Paid	12,500.00	
	6,250.00	
Net Profit for 1925	15,000.00	21,250.00
		$165,250.00

ASSETS

Goodwill	$ 20,000.00
Business Premises, Plant, Machinery, etc.	40,000.00
Stock-in-Trade and Work-in-Process	28,000.00
Sundry Debtors	35,000.00
Investments	20,000.00
Bank	22,250.00
	$165,250.00

(Typical Balance Sheet referred to by the Lecturer.)

There would be no hesitation about that if we did not attempt to arrive at an estimate of profit until the equipment had been worn out and therefore, had to be replaced. In that case we should agree that the whole of the outlay on the original equipment had been completely exhausted and therefore, had to be charged against profits. If only a part of it had been exhausted, it follows that a corresponding part, whatever that might be, had to be charged against the profits which had contributed. As to how we are going to do that is rather outside the scope of my talk to you this evening. It is, as you know, a question of various methods of providing for depreciation of wasting assets, but it is an essential part of our consideration of a Balance Sheet and the adequacy of the information that it gives us, that it should tell us enough to satisfy us, that due and proper provision has been made for the depreciation of the wastage of all the company's assets, which are subject to any kind of diminution entailed by reason of the fact, that they are not perpetually effective as equipment.

More or Less Normal Balance Sheet

Now, if you will examine copy of Balance Sheet, (printed above), I will refer to it. I do not pretend that it is a model Balance Sheet. One would be criticized if one attempted to put forward anything of the kind, because opinion differs and circumstances alter cases. This represents what we might call a more or less normal Balance Sheet, and it is something, which we can confidently have in front of us for the purpose of considering a few points. You will see that it states, without telling us why, that there are assets worth a total of $165,250. We all know that, when a company is unsuccessful, it is not an uncommon thing to find that a Balance Sheet is submitted, which tells a very different tale, from that told by the previous Balance Sheet. We find that the assets are set down at very much smaller figures than before, and the ingenuity of those presenting the Balance Sheet is exercised to explain why that is so. There may be various reasons for it, but what I want to suggest is, that in a Balance Sheet, there should always be an indication of how those figures have been arrived at, in each case. It seems only a reasonable thing to ask for. If they are put down at cost price, let the Balance Sheet plainly state that it is cost price. If they are put down at a figure, which represents a deduction from cost price to cover depreciation, let that fact be stated, and there would be no harm in stating either, the rates at which depreciation has been allowed or who it is, that is satisfied that the rate is adequate. Particularly with regard to such items as "Stock-in-Trade." I think it desirable that information should be given as to who is responsible for the valuation. We know, of course, that everybody cannot be responsible. We know that a board of directors cannot go round taking stock and that possibly, they might not be competent to do so in all cases, but they have to decide on the figure and cause it to be included in the Balance Sheet, and the assumption is that they ought to be able to justify its adoption.

No Harm in Mentioning Officials

The usual way probably is for them to say the figures were certified to them by trusted officials of the company and that they accepted them, but there would be no harm in stating who those trusted officials were; it might in some cases do a certain amount of good, if the names of the responsible officials were mentioned, for it would probably increase their sense of responsibility. Certainly it could do no harm.

The same thing applies with regard to debtors, as to whether proper provision has been made for bad and doubtful debts and who is responsible for that figure. As regards investments, to say the least of it, it is desirable to know whether they are put down at cost price or at market price or upon what basis. In this case we have assets amounting to $165,250 according to the Balance Sheet. On the truth of that must depend the truth of the figures put against the items of reserve fund and Profit and

Loss Account. For present purposes we will take those together as being indistinguishable in the sense that they are both profits, if they have any real existence. They can have no real existence, except to the extent that the assets of the concern may be justly valued at more than the $100,000 paid-up capital of the company plus its liabilities to outside creditors, $24,000. If the whole of the assets are not worth more than $24,000, there are in effect no undivided profits whatever the Balance Sheet may show. The truth of these figures must depend upon the reasonableness of the values attached to the assets, however we may have arrived at those values. Conversely, if the true value of the assets amounts in all to more than $165,250, the true value of the undivided profits is correspondingly more than what we have shown here, which is altogether $41,250. Anything, which interferes with the truth of the value of the assets, interferes to a corresponding extent with the truth of the value attached to the profits, whether we say that we have transferred them to reserve or not.

There are two kinds of profits. There are those, which represent profits in the sense which I have just been talking about, surplus assets after providing for the payment of debts and the repayment of capital and, secondly, in a more limited sense and in the usual business sense, profits represent the earnings of the business after providing for all its current working expenses. There may be increases of wealth arising from causes other than the carrying on of the ordinary business of the concern. For instance, during the war the price of many kinds of machinery went up by leaps and bounds. If a business house had occasion to replace worn-out machinery in those days, they had to pay perhaps two or three times as much as the machinery displaced had originally cost. In one sense we might say that because the prices of machinery had increased the value of the good machinery owned by them had gone up; its wealth had increased with the favorable fluctuation in the prices of the fixed assets, which it owned. Many concerns which have acquired business premises in years past, if they had them revalued today, would find them worth very much more than they originally cost. These improvements in value are undoubtedly interesting and we may think of them in one respect as profits, because we are better off for having them, but that kind of profits could not possibly be divided, without detriment to the business.

Capital Profits

We could not divide them without either depleting our cash resources and leaving ourselves short of working capital to carry on the business, thus crippling our future earning power, or, alternatively, having to sell some of our fixed assets to provide the money we wanted to divide. That would leave us with a mutilated equipment to use, and one less adapted to earn profits in the future. Profits of this kind, which are sometimes called "capital profits," can only be divided to the detriment of future earning power, and therefore, although the precise legal position may be uncertain, we may have no hesitation from the business point of view in saying that these capital profits ought not to be divided. But not only can revenue profits arrived at by carrying on our ordinary daily business in an advantageous way be distributed in cash, leaving us as well off as we were before those profits were made, but they are the kind of profits which in normal circumstances we may expect to recur year by year. Thus, within those limits we may expect that our distributions on account of profits may also be recurring regularly. We know that business profits are never uniform year by year and it is always unwise to set the pace too high in the matter of paying dividends out of profits. It is never wise to start doing what there is a doubt of our ability to keep up afterwards. For that reason a business concern normally puts on one side, or reserves, a part of its profits in good years so that it may be able to maintain the rate of dividend which it has so far been accustomed to provide and in that way avoid disappointing its shareholders by a reduction of dividend.

To some extent, we may judge the ability and success of a board of directors by the success with which they achieve the ideal of never paying a dividend in one year, which cannot be repeated in subsequent years. From the point of view of the Published Balance Sheet, the point, which we want to realize here, is that it cannot be satisfactory if it confuses capital profits with recurring or revenue profit, and that is another very good reason why, it is undesirable that fluctuations in the value of fixed assets should be brought into the Balance Sheet at all.

"Window Dressing"

Let us now pass on to the second part of the title of my talk, which is "Window Dressing." A Balance Sheet represents, or purports to represent, the position of a concern at a moment of time, on the close of business on the date which the Balance Sheet bears. We know, of course, that the position of the concern as regards many of the items in the Balance Sheet would be different on other days of the year. The position, at the moment we have selected, may be a representative position, a normal or average position, or it may have been selected as being a particularly favorable one. To some extent, I think we may say, that almost certainly it will be more favorable than the average position because in any ordinary concern the date selected for the Balance Sheet will be a date in the dead season and probably a date when stock-in-trade is at its lowest and therefore the labor of taking stock is also at its lowest. If the stock-in-trade is abnormally low on the date of the Balance Sheet, probably the other floating items, sundry debtors and sundry creditors, will also be abnormally low and the cash balances abnormally large If that is the reason for choosing, what we may honestly call, the most favorable date for our Balance Sheet, I do not think we can call that "window dressing," but, if in view of the fact, that we have got to present a Balance Sheet on one particular date, we begin deliberately to try to produce on that date a position of affairs, which upon the whole is a more favorable one than the normal, "window dressing" has commenced.

Not a Bad Thing in Itself

To some extent "window dressing" may not be at all a bad thing in itself. It is quite a good thing that we should use the dead season, when we are not preoccupied with our ordinary daily business, to set our house in order and get ready for the next rush of business. It is quite proper, therefore, that we should try to reduce our stock to a minimum and to collect all overdue accounts owing to us, even although the result may be that the Balance Sheet shows a more than usually liquid position of affairs in consequence. There can be nothing improper in it, although it may be a little spectacular, if we have a large bank balance a few days before the close of the year, and use part of it to pay our current liabilities more closely up to date than usual for the sake of bringing them into our Balance Sheet at an abnormally low figure, but "window dressing" may be carried well outside those limits.

Supposing, for instance, taking this Balance Sheet which you have before you, that $20,000 less of what our customers owe us had been collected and that therefore the item of "Sundry Debtors" stood at $55,000 and the bank item at $2,250 only. The position would look much less satisfactory obviously, and it would not be improved by the fact that our Sundry Creditors appeared at $24,000, but the position would be improved, although it would not be as good as we thought it, if we arranged with our bankers for a loan of $20,000, which brought the bank balance back again to $22,250, and increased our Sundry Creditors to $44,000. If we had $44,000 of creditors against $55,000 of debtors and $22,250 at the bank, that might look, if we only had these total figures, to be a quite satisfactory position of affairs, and yet those, who knew more than the published accounts could tell them, would know that nearly half those liabilities

consisted of a loan from the bank which might be repayable at very short notice and that the accounts receivable were $20,000 in arrears, in their collection. If you attempt to disguise these facts by a bank loan, which does not appear clearly as a separate item on the face of the Balance Sheet, that is an illustration of illegitimate "window dressing."

Goodwill

Now I just want to say one word about goodwill. Goodwill represents the value of the reputation, that a business has built up as a result of conducting its affairs in a satisfactory way. When a goodwill changes hands by sale, it is naturally valued somehow or other upon the basis of the earning power of the business, and the earning power of every business fluctuates from year to year; in some very sound businesses it may fluctuate very much. It follows, therefore, that the actual value of the goodwill of a business fluctuates, and sometimes within very wide limits indeed. If you were to attempt to record these fluctuations in our Balance Sheet, you would be attempting to revalue a fixed asset, which you had no present intention of selling, and that would give rise to confusion, for it would cause people to think that what is at best only a capital profit has increased our divisible profit. Conversely, when our profits were falling, we should have to write down the value of goodwill accordingly, and make the position look even worse than it really was from the point of view of the earning power of the business.

Should Be Carried on Indefinitely

As a matter of fact, nobody ever does attempt to revalue the goodwill for Balance Sheet purposes year by year to give effect to those fluctuations, but goodwill is very commonly written down year by year when the profits are sufficiently large to make that practice possible, and many persons confuse that writing down of the goodwill out of profits, with the writing down of such wasting assets as plant and machinery to provide for depreciation. As a matter of fact, the goodwill of a business does not depreciate unless the business is a temporary one. In a permanent business there is no reason why it should not be carried on indefinitely; it is not subject to any inevitable wastage and is not depreciated in the true sense of the term, but because it is the practice to write down plant and machinery and other wasting assets to give effect to depreciation, many persons think that because goodwill is written down from time to time out of profits, it is done because it is a wasting asset and that accordingly provision must be made for its depreciation.

If we write down the value of any asset, we necessarily have to debit Profit and Loss Account with the corresponding figure. If we have written down any asset, which is not in fact deteriorating in value, we have written down the balance of our Profit and Loss Account below the true figure. The effect of writing down goodwill in the published accounts of a company is to withhold from disclosure the fact that profits have been made equal to the amount that has been written off goodwill. That is one of many possible ways of providing what is sometimes called a "secret reserve." It is a way of withholding from disclosure as well as from distribution profits, which in fact exist. It may be a very good thing to do; it may in some cases be the only wise thing to do, but it is just as well to realize that, that is the effect of it.

From Another View Point

Now let us approach the matter from another point of view. We started by assuming that a published Balance Sheet, at all events in the great majority of cases, is a document devised for the information of shareholders. Now the two things, which a shareholder naturally wants to know are: first of all, what dividend he is going to get, and secondly, what is the value of his shares. He is not dependent upon the Balance Sheet for information as to the dividend he is going to get; he will know that soon enough, and by the time he gets the Balance Sheet he commonly knows the dividend, which the directors are going to recommend, and his experience teaches him that almost certainly the dividend, which the directors recommend, will be the dividend paid. The Balance Sheet does not really tell him anything here, that he does not otherwise know.

On the subject of, how a Balance Sheet will tell him what his shares are worth, let us try and test it. The Balance Sheet, which you have in your hand, tells us that we might quite reasonably sell all our assets for $165,250. Out of that we should have to pay creditors $24,000, and the balance of $141,250 would belong to the shareholders; as there is only one class of share, it would belong to them equally. The $141,250 is then the value of the 100,000 shares, so each share would be worth $1.4125, subject to any profits, which the concern might have made since 31st December, which might possibly add a few cents to the value of the share assuming that the company retained the benefit of those profits. You know as well as I do, however, that if you take any published Balance Sheet and work out the value of the shares in that way, and compare it with the market prices of those shares, on the date of the Balance Sheet, you will find that there is no correspondence whatever between the two figures. What does that suggest? Surely it suggest one of two things, or a combination of both—either that the market price is not, so to speak, fixed on the merits of the company, but is due to a mere difference betwen buying orders and selling orders on the Stock Exchange, which are very much in one direction, and therefore tend for the moment to inflate or deflate the price, due possibly to rumors or expectations, which have no basis in fact. That might be one reason.

Cannot Be Accepted as the Whole Truth

The other cause might be that it is unreasonable to assume, as we have, that these Balance Sheet figures are beyond all question. Both causes might be at work, and we might get an exaggerated effect from their both pulling in the same direction, or a minimized effect due to their pulling in opposite directions. I think, however, we may safely say that the discrepancy, which may be observed in any case we like to work out, is due in the main to the fact, that the figures in the Balance Sheet cannot be accepted as the whole truth and nothing but the truth. It may be that the position disclosed by a Balance Sheet is in many respects less favorable than the true one. When that is so, the market price may be expected to be higher than our calculations would show that it ought to be. If the market price of the shares was very much less than our calculations showed, it would probably suggest that, in the minds of those persons, whose opinions go to make the market price, our Balance Sheet shows a position of affairs more favorable than the true one, and that therefore, the true position was worse than the Balance Sheet showed.

Either way, the conclusion we seem to come to, is that there is no observable connection between Published Balance Sheets and market prices. That raises the question in many minds, as to whose fault it is that misleading accounts are published. It is no doubt in most cases an overstatement to say that accounts are misleading because we see this discrepancy. Now, the responsibility for a Balance Sheet rests with the directors of the company. They are not expected to prepare it themselves, but they are expected to cause it to be prepared and they have to approve it, and the Companies Act requires that at least two of them shall sign it as a token that they have done so. Some at least of the responsibility must therefore rest with them. There is also the question of the auditors. Perhaps too much is expected of the auditors. For instance, it is a very common thing for people to talk about the "Auditors' Certificate" on the Balance Sheet. As a matter of fact, the auditor does not issue a certificate. It is possible to certify facts, but a Balance Sheet consists very largely of matters of opinion and no one can certify that an opinion is a fact, or even that it is correct. All that auditors can say, is that "in their opinion," it is reasonable. What an auditor is required to do is not to certify the correctness of

the Balance Sheet, but to report to the shareholders in certain specified terms. (English Law.)

Only Guidance on the Point

He has to report that the Balance Sheet is properly made up, so as to show a true and correct view of the position of the company's affairs according to the books, and everything there seems to hinge upon what is really meant by "a true and correct view." About the only guidance we get upon that point is that it has been held in the case of Newton v. The Birmingham Small Arms Company that there is no impropriety in the directors of a company issuing a Balance Sheet, which shows a position of affairs less favorable that the true position, but, it was pointed out that, that did not diminish the responsibility of the auditors. The auditors still had the right, if they thought fit, to report to the shareholders as to the true position, and they are therefore, left plainly enough with a larger measure of responsibility than the directors. It may be thought to be their duty to report to the shareholders, something, which it has been held not to be the duty of the directors to report.

That being the state of the law, it is perhaps not very surprising that the customary practice should not always be regarded as entirely satisfactory by all persons, and I think perhaps that, without taking any extreme view, we may all agree that perhaps, sometimes auditors are too inclined to regard these statutory words in the report as a mere convention: a mere form of words to which they have got to subscribe so long as they are satisfied with the *bona fides* of the firm. That certainly seems to be the present practice, and if it is thought to be undesirable, perhaps it might be taken up by the Committee which is now sitting to enquire as to desirable amendments in Company Law. In the meanwhile the fact remains, I think you will agree, that Published Balance Sheets in general fail to afford shareholders any very reliable indication as to the value of their holdings.

A New Power Transmission Catalogue

A new catalogue, brimful of power transmission and engineering information has just been issued by The Hill Clutch Machine and Foundry Company of Cleveland, Ohio. This catalogue Number Twenty-Six, is printed in three sections A, B and C.

Section 26-A illustrates and describes a new Flexible Coupling of unique simplicity, flanged and compression coupling, shafting and bearings. A large part of this section is devoted to the illustration and description of the remarkably efficient "Cleveland Type" Oil Film Bearing, in which the rotating shaft or journal is supported without metallic contact, on a nearly frictionless film of oil. Complete data is given on a heavy duty form of this bearing, in which bearing temperatures, due either to external heat or high speed and heavy pressures, are controlled by cooling the lubricating oil with a circulating water cooling system. Another item in this section is an improved type of clamp for securing bearings to structural steel without the necessity of drilling holes.

Section 26-B covers fully the application of the patented "Smith Type" Hill Clutch Pulleys and Cut-Off Couplings including quill drives. A complete horse-power table is presented from which friction clutch or plain pulleys may be chosen to meet any requirements. Full data and dimension tables enable the designer to incorporate any of the standard forms of "Smith Type" Hill Clutches in power transmission layouts. Following pages take up transmission of power by belting, giving formulas and tables covering the horse-power of leather belting. Applications of belt tighteners to secure maximum horse-power transmitted is discussed in detail. The application of the new "Steelarm" Automatic Belt Tightener, which provides means of scientifically controlling belt slip, will be of interest to engineers and power transmission men in many industries.

Section 26-C illustrates and describes both American and English Systems of rope drives; agitator designs, parts and gearing; "Forged-Cast," iron cast tooth, and cut spur and bevel gears; "Industrial Type" Speed Transformers; and a wealth of pertinent engineering data such as bolt strengths and dimensions, pipe dimensions, threads and tap drills, sheet and wire gauges, fusion temperatures, tables of allowable loads on structural shapes, concrete data, trigonometric functions, areas and circumferences of circles, etc.

The various industries using agitators will find the standardized agitator parts very helpful in laying out and building up agitator units at small expense. For agitator and other slow speed machine drives, the "Industrial Type" Speed Transformer provides an ideal means of obtaining the required low speed direct from a high speed motor. This speed transformer consists of an oil tight cast iron housing enclosing a train of spur gears. All gears have 20° involute generated teeth. Pinions are hardened. Mating gears are "Forged-Cast." Automatic flood lubrication of nicely fitted bronze bearings eliminates friction and maintenance. Every gear or pinion is supported between two bearings.

The "Forged-Cast" Gears are used in the "Industrial Type" Speed Transformers represent the latest development in gear manufacture. The teeth of these gears are generated in a solid forged and machined steel ring, into which has been previously cast, by a special process, an iron hub and web or arms. The union of iron hub and steel rim is a laminated weld, and the finished gear is one integral piece. Since the teeth are cut in solid forged steel, 100 per cent. tooth strength is assured. These gears are available for general mill and machine reduction gearing. The portion of Section C covering gearing illustrates actual tooth sizes for usual pitches, and gives gear horse-power in tabulated form, calculated from Lewis formulae.

The three sections of catalogue No. 26 have a total of 258 pages, and are substantially bound. Each section is profusely illustrated and line drawings of individual products furnish controlling dimensions of all sizes.

Engineers, master mechanics, plant superintendents and purchasing agents will find this new catalogue a power transmission text book in three convenient volumes.

To Represent Tissue Co. on Pacific Coast

SAUGERTIES, N. Y., August 23, 1926.—David L. Maxwell, for many years connected with the Tissue Company as treasurer and general manager, has decided to locate in California as Pacific Coast representative. He will retain his office as Treasurer of the Company.

In view of the fact that Mr. Maxwell has had ten years' experience at the mill, he will be extremely conversant with the high grade products of the Tissue Company which are coarse and silk crepe paper, creped and embossed napkins.

Mr. Maxwell intends to make a pilgrimage back to his native town each year so as to keep in intimate touch with his mill. His legion of friends extend their hearty well wishes for his success in a new field.

Aerial Service Does Good Work

Ontario has been remarkably free from forest fires this year but, owing to the hot dry weather of late, several fires broke out in the Nipigon district which were speedily extinguished by the rangers and through the good work of the aerial patrol service. Hydroplanes were rushed to the scene with fighting apparatus. The aerial equipment which was started by Hon. James Lyons, former Minister of Lands and Forests for the province some three or four years ago, in the face of considerable opposition, has proved its worth and effectiveness. Ontario has been freer of devastation by forest conflagrations this summer than any of the other provinces of the Dominion.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING AUGUST 21, 1926

SUMMARY

Cigarette paper .....18 bls., 3361 cs.
Wall paper .....15 bls., 29 cs.
Paper hangings .....9 bls., 5 cs.
Paint paper .....32 cs.
News print .....137 bls., 2153 rolls
Printing paper .....43 bls., 149 rolls, 93 cs.
Packing paper .....44 cs.
Wrapping paper .....10 cs.
Kraft paper .....29 rolls
Note paper .....4 cs.
Writing paper .....5 cs.
Drawing paper .....29 cs.
Filter paper .....24 cs.
Colored paper .....95 cs.
Litho paper .....12 cs.
Tissue paper .....4 cs.
Surface coated paper .....224 cs.
Gold coated paper .....5 cs.
Metal paper .....33 cs.
Decalcomania paper .....23 cs.
Stencil paper .....31 cs.
Parchment paper .....11 cs.
Basic paper .....72 cs.
Pergamyn paper .....19 cs.
Wall board .....40 cs.
Miscellaneous paper....557 bls., 692 rolls, 213 cs.

CIGARETTE PAPER

R. J. Reynolds Tobacco Co., Collamer, St. Nazaire, 1420 cs.
De Manduit Paper Corp., Collamer, St. Nazaire, 334 cs.
American Tobacco Co., Collamer, Bordeaux, 1300 cs.
P. J. Schweitzer, Rochambeau, Havre, 25 cs.
The Surbrug Co., Rochambeau, Havre, 42 cs.
Standard Products Corp., Rochambeau, Havre, 100 cs.
Standard Products Corp., McKeesport, Havre, 140 cs.
M. Spiegel & Son, Colombo, Genoa, 18 bls.

WALL PAPER

R. F. Downing & Co., Minnekahda, London, 1 cs.
F. J. Emmerich, Cleveland, Hamburg, 2 cs.
Bendix Paper Co., Cleveland, Hamburg, 24 cs.
F. A. Binder, Yorck, Bremen, 2 cs.
F. J. Emmerich, Resolute, Hamburg, 15 bls.

PAPER HANGINGS

Whiting & Patterson Co., Caronia, Liverpool, 2 cs.
A. C. Dodman, Jr., Inc., Baltic, Liverpool, 5 bls.
G. J. Hunken Co., Inc., Cleveland, Hamburg, 4 bls.
Downing & Co., Rochambeau, Havre, 3 cs.

PAINT PAPER

Keller Dorian Paper Co., Rochambeau, Havre, 32 cs.

NEWS PRINT

New York Post, Mathilda, Cornerbrook, N. F., 774 rolls.
New York Times, Mathilda, Cornerbrook, N. F., 1766 rolls.
New York Call, Mathilda, Cornerbrook, N. F., 25 rolls.
Parsons & Whittemore, Inc., Pr. Harding, Bremen, 288 rolls.
H. Reeve Angel & Co., Inc., Pr. Harding, Bremen, 137 bls.

PRINTING PAPER

P. C. Zuhlke, Belgenland, Antwerp, 25 cs.
F. L. Kramer, Minnekahda, London, 4 cs.
E. Dietzgen & Co., Cleveland, Hamburg, 58 cs.
W. Hartman & Co., Inc., Cleveland, Hamburg, 13 bls.
B. F. Drakenfeld & Co., Laconia, Liverpool, 6 cs.
H. Reeve Angel & Co., Inc., Pr. Harding, Bremen, 30 bls.
Keuffel & Esser, Resolute, Hamburg, 149 rolls.

PACKING PAPER

Old Master Paper & Pulp Co., Cleveland, Hamburg, 44 cs.

WRAPPING PAPER

C. Steiner, Yorck, Bremen, 5 cs.
Bendix Paper Co., Resolute, Hamburg, 5 cs.

KRAFT PAPER

Arkell Safety Bag Co., Stockholm, Gothenburg, 29 rolls.

NOTE PAPER

W. J. Byrnes, Cleveland, Hamburg, 4 cs.

WRITING PAPER

F. B. Vandegrift & Co., Olympic, Southampton, 3 cs.
J. D. Smith, Olympic, Southampton, 1 cs.
Globe Shipping Co., McKeesport, Havre, 1 cs.

DRAWING PAPER

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Keuffel & Esser, Resolute, Hamburg, 21 cs.
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E. Dietzgen & Co., Cleveland, Hamburg, 71 cs.
P. H. Petry & Co., Resolute, Hamburg, 7 cs.

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F. C. Strype, Laconia, Liverpool, 1 cs.

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Phoenix Shipping Co., Resolute, Hamburg, 11 cs.

GOLD COATED PAPER

Weiss Forwarding Co., Yorck, Bremen, 3 cs.
C. B. Richard & Co., Pr. Harding, Bremen, 2 cs.

METAL PAPER

Hensel, Bruckman & Lorbacher, Yorck, Bremen, 33 cs.

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L. A. Consmiller, Cleveland, Hamburg, 14 cs.
A. W. Fenton, Inc., Cleveland, Hamburg, 1 cs.
C. W. Sellers, Yorck, Bremen, 2 cs.
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STENCIL PAPER

Arlac Dry Stencil Co., Cleveland, Hamburg, 31 cs.

PARCHMENT PAPER

Maurice O'Meara Co., Cleveland, Hamburg, 11 cs.

BASIC PAPER

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PERGAMYN PAPER

F. C. Strype, Cleveland, Hamburg, 19 cs.

WALL BOARD

O. M. Baxter, Stockholm, Gothenburg, 40 cs.

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Commonwealth Bank, Cleveland, Hamburg, 10 cs.
International Forwarding Co., Cleveland, Hamburg, 4 cs.
Perkins, Goodwin & Co., Cleveland, Hamburg, 40 cs.
Japan Paper Co., Rochambeau, Havre, 64 cs.
H. Glass & Co., Rochambeau, Havre, 10 cs.
D. C. Andrews & Co., Rochambeau, Havre, 5 cs.
Arkell Safety Bag Co., Stockholm, Gothenburg, 299 rolls.
M. M. Cohen, Stockholm, Gothenburg, 147 bls., 28 rolls.
Universal Paper Co., Stockholm, Gothenburg, 33 bls., 365 rolls.
The Borregaard Co., Inc., Stockholm, Gothenburg, 377 bls.
E. H. Sergeant & Co., Stockholm, Gothenburg, 2 cs.
F. B. Vandergrift & Co., Olympic, Southampton, 1 cs.
Quality Art Novelty Co., McKeesport, Havre, 4 cs.
Japan Paper Co., Colombo, Genoa, 53 cs.

RAGS, BAGGINGS, ETC.

Robert Blank, Belgenland, Antwerp, 45 bls. rags.
Anglo-South American Trust Co., Belgenland, Antwerp, 224 bls. flax waste.
E. J. Keller Co., Inc., Belgenland, Antwerp, 120 bls. flax waste.
Albion Trading Co., Washington Maru, Hamburg, 19 bls. rags.
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S. Silberman & Co., Eastern Dawn, Antwerp, 47 bls. rags.
The Stone Bros. Co., Inc., Eastern Dawn, Antwerp, 215 bls. rags.
Whaling Waste Products Co., Eastern Dawn, Antwerp, 47 bls. jute waste.
Whaling Waste Products Co., Eastern Dawn, Antwerp, 25 bls. bagging.
Royal Manfg. Co., Eastern Dawn, Antwerp, 33 bls. thread waste.
Royal Manfg. Co., Eastern Dawn, Antwerp, 31 bls. rags.
Royal Manfg. Co., Eastern Dawn, Antwerp, 94 bls. bagging.
Mutnik Bros., Eastern Dawn, Antwerp, 13 bls. rags.
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Castle & Overton, Inc., Oscar II, Copenhagen, 77 bls. rags.
National City Bank, Oscar II, Copenhagen, 460 bls. bagging.
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Brown Bros. & Co., Sinsinawa, Alexandria, 250 bls. rags.
Central National Bank, Laconia, Liverpool, 35 bls. rags.
Atlas Waste Manfg. Co., McKeesport, Havre, 179 bls. rags.
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L. H. Abenheimer, McKeesport, Havre, 54 bls. bagging.
A. W. Fenton, Inc., McKeesport, Havre, 118 bls. rags.
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Robert Blank, McKeesport, Havre, 46 bls. rags.
E. Mayer, McKeesport, Havre, 48 bls. rags.
J. Cohen, Bellepline, Rotterdam, 40 bls. bagging.
Bulkley, Dunton & Co., Bellepline, Rotterdam, 129 bls. rags.
A. H. Searle, Hoxie, Cardiff, 135 bls. rags.
Brown Bros. & Co., Hoxie, Dublin, 39 bls. rags.
E. J. Keller Co., Inc., Veendam, Rotterdam, 34 bls. rags.

OLD ROPE

Brown Bros. & Co., Belgenland, Antwerp, 155 coils.
Brown Bros. & Co., Galileo, Newcastle, 98 coils.
Brown Bros. & Co., Galileo, Hull, 168 coils.
S. Birkenstein & Sons, Eastern Dawn, Antwerp, 44 coils.
Brown Bros. & Co., McKeesport, Havre, 98 coils.
W. Schall & Co., McKeesport, Havre, 16 coils.

WOOD PULP

J. Anderson & Co., Washington Maru, Hamburg, 1875 bls. wood pulp, 365 tons.
National City Bank, Washington Maru, Hamburg, 800 bls. wood pulp, 160 tons.
D. M. Hicks, Inc., Washington Maru, Hamburg, 356 bls. wood pulp, 53 tons.
W. Hartmann & Co., Inc., Washington Maru, Hamburg, 170 bls. wood pulp, 25 tons.
J. Anderson & Co., Norefjord, Iggesund, 800 bls. sulphite, 100 tons.
Bulkley, Dunton & Co., Norefjord, Iggesund, 500 bls. sulphate, 100 tons.
Bulkley, Dunton & Co., Norefjord, Gefle, 3625 bls. sulphite, 736 tons.
Pagel, Horton & Co., Inc., Norefjord, Gefle, 750 bls. sulphite, 152 tons.
Pagel, Horton & Co., Inc., Norefjord, Gefle, 1500 bls. sulphate, 304 tons.
Scandinavian Pulp Agency, Inc., Norefjord, Skutskar, 7135 bls. dry pulp, 1299 tons.
E. M. Sergeant & Co., Sagoporack, Hernosand, 6300 bls. sulphite, 1050 tons.

(Continued on page 66)

JAMES W. SEWALL
Consulting Forester
OLD TOWN MAINE
Largest Cruising House in America

VITALE & ROTHERY
FOREST ENGINEERS
527 Fifth Avenue New York, N. Y.

JAMES L. CAREY
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Consulting Chemical Engineer
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SPECIAL FIBRE PRODUCTS AND PROCESSES
HOMOGENEOUS BOARDS,
WATERPROOFING COMPOSITIONS
FORMING AND DRYING MACHINES
UTILIZATION OF WASTE FIBRES
PURIFICATION OF EFFLUENTS

Salomon Bros. & Co.
IMPORTERS OF
All Grades of Rag and Paper Stock
200 FIFTH AVENUE, NEW YORK
COTTON WASTE :: LINTERS :: RAMIE

FRANKLIN PAPER CO HOLYOKE MASS.
MANUFACTURERS OF
Index Bristols, White Bristol Blanks, Etc.

HAYTON PUMP and BLOWER CO.
APPLETON, WIS.
Centrifugal and Triplex Pumps
FOR ALL PURPOSES
Designing Pumps to Fit All Conditions Our Specialty

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PULP AND PAPER MILL ENGINEER

J. O. Ross Engineering Corp.
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VAPOR ABSORPTION SYSTEMS

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Digester, Acid Proof and other Guaranteed Linings *Bleaching Systems*

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A New Service based on twenty-five years' Practical Experience

C. C. HOCKLEY
Consulting Engineer
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A. J. BRADLEY MFG. COMPANY
Oiled Stencil Board
Lamp Shade Parchment
IN A VARIETY OF GRADES AND COLORS
101 BEEKMAN STREET NEW YORK

Dilts
"Your paper is made in your Beaters"
See Page 37 last week's issue
NEW TYPE Fast Circulating Beating Engines
Dilts
MACHINE WORKS, Inc. FULTON, N.Y.
EXPORT OFFICE - 15 PARK ROW - NEW YORK CITY

Imports of Paper and Paper Stock

(Continued from page 64)

Johanson, Wales & Sparre, Inc., Sagoporack, Hernosand, 1290 bls. sulphite, 215 tons.
Johanson, Wales & Sparre, Inc., Sagoporack, Hernosand, 1500 bls. sulphate, 250 tons.
Price & Pierce, Ltd., Sagoporack, Sikea, 150 bls. dry pulp, 25 tons.
Pagel, Horton & Co., Inc., Sagoporack, Husum, 12000 bls. sulphate, 2000 tons.
Tidewater Papermills Co., Bornholm, Botwood, 6798 bls. wood pulp.
J. Anderson & Co., Stockholm, Gothenburg, 125 bls. sulphite.
Johanson, Wales & Sparre, Inc., Stockholm, Gothenburg, 748 bls. dry soda pulp.
E. M. Sergeant & Co., Stockholm, Gothenburg, 150 bls. dry soda pulp.
Tidewater Papermills Co., Aslaug, Gaspe, 9123 bls. wood pulp.
D. M. Hicks, Inc., Oscar II, Copenhagen, 600 bls. wood pulp.
J. Anderson & Co., Nevada, Oslo, 900 bls. sulphite.
Buck, Kiaer & Co., Inc., Nevada, Oslo, 650 bls. wood pulp.
Irving Bank-Columbia Trust Co., Yorck, Bremen, 318 bls. wood pulp.
Buck, Kiaer & Co., Inc., Bergensfjord, Oslo, 1200 bls. kraft pulp.
Buck, Kiaer & Co., Inc., Bergensfjord, Oslo, 600 bls. sulphite.
Buck, Kiaer & Co., Inc., Bergensfjord, Hommelvik, 3000 bls. sulphite.
American Exchange Pacific National Bank, Bergensfjord, Oslo, 400 bls. sulphite.

WOOD PULP BOARDS

Lagerloef Trading Co., Pr. Harding, Bremen, 169 bls., 24 tons.

WOOD FLOUR

Innes Speiden & Co., Stockholm, Gothenburg, 1089 bags.
B. L. Soberski, Nevada, Oslo, 2400 bags.

CASEIN

Atterbury Bros., Inc., Collamer, Bordeaux, 1065 bags, 80,332 kilos.
Karolith Corp., Collamer, Bordeaux, 402 bags, 30,000 kilos.
T. M. Duche & Sons, West Calumb, Buenos Aires, 1668 bags, 100,080 kilos.
Kalbfleisch Corp., W. World, Buenos Aires, 1334 bags.

NORFOLK IMPORTS

WEEK ENDING AUGUST 21, 1926

Parsons & Whittemore, Inc., Yorck, Bremen, 731 rolls news print.
Chase National Bank, Yorck, Bremen, 106 bls. bagging.
Virginia National Bank, Yorck, Bremen, 113 bls. bagging.

PHILADELPHIA IMPORTS

WEEK ENDING AUGUST 21, 1926

Castle & Overton, Inc., Schodack, France, 40 bls. rags.
Castle & Overton, Inc., Hameln, Germany, 128 bls. rags.
Castle & Overton, Inc., Hameln, Germany, 1542 bls. wood pulp.
Castle & Overton, Inc., Nessian, Belgium, 56 bls. rags.
Castle & Overton, Inc., Lorain, Denmark, 72 bls. rags.
Castle & Overton, Inc., London Exchange, London, 118 coils old rope.
Castle & Overton, Inc., Tomalva, Belgium, 449 bls. rags.
Castle & Overton, Inc., Sachsenvald, Germany, 58 bls. rags.
Johanson, Wales & Sparre, Inc., Sagoporack, Hernosand, 600 bls. sulphite pulp, 100 tons.
Pagel, Horton & Co., Inc., Sagoporack, Hornefors, 2817 bls. sulphite, 469 tons.
Pagel, Horton & Co., Inc., Sagoporack, Husum, 231 bls. sulphite, 38 tons.
The Stone Bros. Co., Inc., Collamer, Bordeaux, 1078 bls. rags.
Robert Blank, Collamer, Bordeaux, 661 bls. rags.
D. I. Murphy, Collamer, Bordeaux, 465 bls. rags.
Katzenstein & Keene, Inc., Collamer, Bordeaux, 310 bls. rags.
Baltimore Trust Co., Collamer, Bordeaux, 64 bls. rags.
T. M. Duche & Sons, Collamer, Bordeaux, 188 bags casein, 15,000 kilos.
E. J. Keller Co., Inc., Collamer, St. Nazaire, 636 bls. rags.
The Stone Bros. Co., Inc., Collamer, St. Nazaire, 619 bls. rags.
D. I. Murphy, Collamer, St. Nazaire, 153 bls. rags.
Brown Bros. & Co., Lehigh, London, 376 bls. rags.
Chase National Bank, Lehigh, London, 102 coils old rope.
Union National Bank, Lehigh, London, 274 bls. rags.
Philadelphia Bulletin, Mathilda, Cornerbrook, 2357 rolls news print.
D. I. Murphy, Eastern Dawn, Antwerp, 236 bls. rags.
Castle & Overton, Inc., Eastern Dawn, Antwerp, 266 bls. rags.
E. J. Keller Co., Inc., Eastern Dawn, Antwerp, 280 bls. rags.
S. Birkenstein & Sons, Eastern Dawn, Antwerp, 50 bls. rags.
J. A. Steer & Co., Eastern Dawn, Antwerp, 244 bls. rags.
Central National Bank, Eastern Dawn, Antwerp, 349 bls. rags.
Franklin Paper Co., Eastern Dawn, Antwerp, 56 bls. packing paper.
Castle & Overton, Inc., Yorck, Bremen, 902 bls. wood pulp.
Johnston Paper Co., Yorck, Bremen, 108 bls. paper.
Grace National Bank, Yorck, Bremen, 58 bls. rags.
Philadelphia Natl. Bank, Yorck, Bremen, 290 bls. rags.
Strupp & Co., Yorck, Bremen, 429 bls. rags.
Castle & Overton, Inc., Yorck, Bremen, 58 bls. rags.
L. H. Abenheimer, Yorck, Bremen, 93 bls. rags.
Philadelphia Natl. Bank, Yorck, Bremen, 196 bls. rags.
Robert Blank, Carso, Naples, 212 bls. rags.
Robert Blank, Savannah, Glasgow, 249 bls. rags.
International Accep. Bank, Nevada, Copenhagen, 11 bls. paper.
Bank of New York, Nevada, Copenhagen, 767 bls. rags.
Union National Bank, Nevada, Copenhagen, 182 coils old rope.
Bank of New York, Nevada, Copenhagen, 91 coils old rope.
Central National Bank, Nevada, Oslo, 500 bls. wood pulp.
Atterbury & McKelvey, Navada, Oslo, 500 bls. wood pulp.
The Borregaard Co., Inc., Nevada, Oslo, 1200 bls. sulphate.
J. Anderson & Co., Nevada, Oslo, 900 bls. sulphite.
The Borregaard Co., Inc., Nevada, Oslo, 150 bls. sulphite.
E. J. Keller Co., Inc., Nessian, Rotterdam, 33 bls. rags.
E. J. Keller Co., Inc., Carso, Genoa, 148 bls. rags.
E. J. Keller Co., Inc., Carso, Algiers, 198 bls. rags.
E. J. Keller Co., Inc., Western Plains, Antwerp, 217 bls. rags.
Bulkley, Dunton & Co., Bellepline, Rotterdam, 20 bls. rags.
Bryer Murphy, Bellepline, Rotterdam, 35 bls. rags.
The Stone Bros. Co., Inc., Bellepline, Rotterdam, 409 bls. rags.
G. W. Millar & Co., Bellepline, Rotterdam, 138 bls. rags.
G. W. Millar & Co., Bellepline, Rotterdam, 74 bls. fustians.
S. Spector & Co., Bellepline, Rotterdam, 72 bls. rags.
D. I. Murphy, Bellepline, Rotterdam, 18 bls. rags.
Spaulding & Tewksbury, Bellepline, Rotterdam, 100 rolls straw board.
S. E. Ingber, Bellepline, Rotterdam, 65 bls. rags.
R. Wolf, Bellepline, Rotterdam, 26 bls. rags.

BOSTON IMPORTS

WEEK ENDING AUGUST 21, 1926

J. Anderson & Co., Nevada, Oslo, 4836 bls. wood pulp.
The Borregaard Co., Inc., Nevada, Oslo, 1060 bls. wood pulp.
D. M. Hicks, Inc., Nevada, Oslo, 160 bls. wood pulp.
Castle & Overton, Inc., West Harcuvar, Germany, 367 bls. wood pulp.
Castle & Overton, Inc., Barbadan, England, 96 bls. waste paper.
E. J. Keller Co., Inc., Pipestone Co., Havre, 370 bls. rags.
Robert Blank, Sac City, Antwerp, 235 bls. rags.

BALTIMORE IMPORTS

WEEK ENDING AUGUST 21, 1926

Congoleum Co., Washington Maru, Hamburg, 309 bls. rags.
Johanson, Wales & Sparre, Inc., Washington Maru, Hamburg, 200 bls. sulphite, 35 tons.
W. Hartmann & Co., Inc., Washington Maru, Hamburg, 168 bls. sulphite, 25 tons.
Pagel, Horton & Co., Inc., Norefjord, Gefle, 2750 bls. sulphite, 482 tons.
Pagel, Horton & Co., Inc., Norefjord, Gefle, 2000 bls. sulphate, 406 tons.
Bulkley, Dunton & Co., Norefjord, Gefle, 2000 bls. sulphite, 406 tons.
Scandinavian Pulp Agency, Inc., Norefjord, Skutskar, 2800 bls. dry pulp, 355 tons.
National City Bank, Lehigh, London, 139 bls. rags.
Anglo-South American Trust Co., Nevada, Copenhagen, 500 bls. bagging.
Atterbury & McKelvey, Nevada, Oslo, 1800 bls. wood pulp, 300 tons.
J. Anderson & Co., Nevada, Greaker, 300 bls. wood pulp, 50 tons.
Castle & Overton, Inc., Yorck, Bremen, 555 bls. wood pulp.
National City Bank, Yorck, Bremen, 292 bls. rags.
A. Schumacher, Yorck, Bremen, 832 bls. wood pulp.
Chase National Bank, McKeesport, Havre, 371 bls. rags.
E. J. Keller Co., Inc., West Campgaw, Hamburg, 150 bls. wood pulp.
Castle & Overton, Inc., Hameln, Germany, 1167 bls. wood pulp.
Castle & Overton, Inc., Sac City, Belgium, 79 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING AUGUST 21, 1926

Robert Blank, Ontario, Antwerp, 239 bls. rags.
Castle & Overton, Inc., The Lambs, France, 704 bls. rags.

Paper Exports From Germany Increase

WASHINGTON, D. C., August 25, 1926.—Exports of paper and boards, including manufactures, from Germany during the first six months of the current year exceeded those of the corresponding period in 1925 by nearly 30 per cent, the chief increases occuring in shipments of printing, wrapping, and writing papers which represent two-thirds of the volume of total shipments. Exports of the first increased from 79,653 metric tons during the first half of 1925 to 96,129 tons during the first half of 1926, while exports of wrapping papers show a rise from 46,626 tons to 71,200 tons, and writing papers from 16,674 tons to 11,798 tons.

Victoria Men Visit Wayagamack

Leo Charles, general manager of the Victoria Paper and Twine Company, Toronto, and his staff of salesmen, lately paid a visit to the plant of the Wayagamack Pulp and Paper Co., at Three Rivers, Que. They were cordially welcomed. The Victoria Co. handle kraft made by the Wayagamack Co.

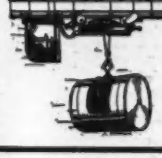
ROLL PAPER—We are always interested in large lots of roll paper—any size or diameter.
Paper Manufacturers Co. Inc.
5th & Willow Sts., Phila., Pa.

FOURDRINIER CYLINDER, WASHER WIRE
FOR SERVICE
GREEN BAY WIRE WORKS
GREEN BAY, WISC.

Ruths Accumulator Company, Inc.
292 Madison Av., New York City

INTERNATIONAL PULP CO.
NEW YORK CITY
ASBESTINE PULP
857. U. S. PATENT OFFICE
FILLER
90% Retention

CLEVELAND TRAMRAIL SYSTEMS



The Modern Way of Handling Paper
Cleveland Electric Tramrail
Division of
The Cleveland Crane & Engineering Co.
Wickliffe, O.

THE GEORGE M. GRAVES CO., Inc.
Domestic and Foreign
WASTE PAPER NEW CUTTINGS HEMP ROPE
OLD RAGS MANILA ROPE FLAX WASTE
WOOD PULP BAGGING COTTON WASTE
77 SUMMER STREET BOSTON, MASS

UNION TALC COMPANY
Finest Grades of Agalite
147 Nassau Street New York

THE BRISTOL COMPANY
Waterbury, Conn.
Recording Instruments
for Pressure, Liquid Level, Temperature, Humidity, Time, Motion, Speed, Electrical Units, etc.

Import Credits

Complete facilities for opening letters of credit in Scandinavia to finance importations of wood-pulp and paper.

INTERNATIONAL ACCEPTANCE BANK, INC.
52 Cedar Street, New York
PAUL M. WARBURG, *Chairman* F. ABBOT GOODHUE, *President*

ROONEY HUNT

Wood, Metal and Rubber Rolls

Your Card in This Space Will Bring Results

Rates on Application

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, August 25, 1926.

Trading in the local paper market during the past week was mostly along routine lines, although the amount of business transacted was considered fairly satisfactory for the time of the year. After Labor Day, a material broadening of business is confidently anticipated, and sales forces of the leading paper houses are preparing to take advantage of the more active market which should prevail. Prices in practically all sections of the paper industry are holding up very well, and the trend of the market is firm.

Demand for news print continues above normal and the increased production maintained this year is being absorbed more readily than had been expected in some quarters. According to figures compiled by the New York Evening Post, there were 108,941,000 agate lines of advertising in the newspapers of 23 principal cities of the United States during June, 1926, compared with 98,733,000 lines during June, 1925, an increase of 10 per cent and 100,354,000 lines in June, 1924, an increase of 8 per cent. There was an increase of 8 per cent during the first six months of 1926 over 1925 and 8 per cent over 1924.

New York City newspapers carried about 10 per cent more advertising in first seven months than in the first seven months of 1925 and 12 per cent more than in same period of 1924. There was 9 per cent more pages of advertising and reading matter in these papers in first seven months of 1926 than in these months of 1925. Advertising in national monthly and weekly periodicals for seven months of 1926 amounted to 15,737,000 agate lines, compared with 14,476,000 lines in first seven months of 1925, a gain of 9 per cent and 17,661,000 lines in first seven months of 1920, a loss of 11 per cent.

Some improvement has been noticed in the paper board market. Production is now approaching capacity, and the demand is also beginning to expand with the approach of the autumn season. The fine paper market is in an excellent position, and quotations are generally holding up to former levels. Tissues are also in good request. Summer specialties remain the bright particular features of the coarse paper market, while the request for wrapping paper is still persistent.

Mechanical Pulp

Contract withdrawals of both domestic and imported ground wood are going forward at a good pace. Production is keeping ahead of consumption, and stocks in hand are in sufficient volume to take care of current needs. Trading in the spot market, however, has been rather light of late. Quotations remain steady to firm.

Chemical Pulp

Despite the strike in the Norwegian pulp mills, and the depression of the English paper industry on account of the lack of coal, the local chemical pulp market has not been affected by the European situation to any great extent so far. Prices are now steadier than for some time past and there is little talk of shading. Shipments against contract are moving into consumption in a normal manner, and the outlook is considered promising.

Old Rope and Bagging

The demand for old rope is fairly satisfactory at present and prices are keeping up to formerly quoted levels. Roofing bagging is in moderate request, but the demand for all other grades of bagging is rather light. Prices are practically unchanged. Some observers of the market predict a general expansion of business in the Fall.

Rags

Roofing rags are still in good request at previously quoted prices. A good volume of inquiries are being received for mixed khaki cuttings and pink corset cuttings. The foreign rag situation is practically unchanged. Some importers express the view that prices abroad are too high to allow for a reasonable profit.

Waste Paper

Collections of waste paper are still below normal, and prices are very firm. It is reported that a better inquiry is developing from the board mills, and the market is exhibiting quite a strong undertone. Print manilas are now offered at from .85 to .90. No. 1 white news has advanced to from 1.65 to 1.75, and other advances recorded are on strictly overissue news, from .70 to .75; strictly folded news, from .60 to .65; and No. 1 mixed paper, from .55 to .60.

Twine

No radical changes have transpired in the twine market. While the amount of business being transacted at present is rather small, it is felt that this condition is only seasonal, and that a revival of activities is bound to take place when the holiday season draws to a close. Prices are still low and unchanged from recently quoted levels.

American Writing Plan Approved

Announcement was made Monday that the plan and agreement dated July 1, 1926, calling for the reorganization of the American Writing Paper Company has been declared operative, more than 80 per cent of outstanding bonds and over 80 per cent of claims having been deposited with the reorganization committee of which George C. Lee is chairman. The committee also announces an extension of time for deposits until the close of business on September 15, 1926, after which date deposits will be received only at the discretion of the committee and upon such conditions as it may impose.

Holders of preferred stock and common stock and of certificates of deposit therefor issued under the stockholders' protective agreement, dated September 12, 1923, desiring to exercise the rights of purchase will be required to pay at the time of deposit in addition to the first installment of the purchase price, interest thereon at the rate of 6 per cent per annum from August 14, 1926, to date of payment.

British Wrapping Mills Benefited by Duty

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., August 25 1926.—British wrapping paper mills are beginning to feel the benefit of the new duty granted this class of paper according to a report from Vice Consul Davis B. Lefis, Newcastle-on-Tyne, who further states that the effect of this step could be better judged if it were not for the coal shortage, which has caused many mills to close down. Prices have been advanced slightly to cover the increased cost of raw materials.

COMBUSTION ENGINEERING CORPORATION
PULVERIZED FUEL
45 BROAD STREET, NEW YORK

Penn Paper and Stock Company
PACKERS OF ALL GRADES OF
WASTE PAPER
240 N. FRONT STREET PHILADELPHIA

"THE FOURDRINIER THAT TOOK THE IRE OUT OF WIRE"
INTERNATIONAL WIRE WORKS
MENASHA, WISCONSIN

ATTERBURY BROS.
(INCORPORATED)
WOOD PULP, RAGS AND PAPER STOCK, FRENCH CASEINE
110 EAST 42nd STREET NEW YORK

GATTI PAPER STOCK CORPORATION
41 East 42nd St., New York
Paper and Woolen Mfrs.' Supplies
COTTON AND WOOLEN WASTE
Warehouse—Hoboken, N. J. Branch Office—Holyoke, Mass

FELTS
H. WATERBURY & SONS CO.
ORISKANY, N. Y.

PAPER TESTS
In Accordance with T. A. P. P. I. Standard Methods
Oils — Paper — Water — Microphotograph
Electrical, Mechanical, Physical, Chemical and Photometric Tests
ELECTRICAL TESTING LABORATORIES
80th St. & East End Ave., New York

Nash Hytor
VACUUM PUMPS AND AIR COMPRESSORS
Is widely used for every vacuum need in the mill,—for removing water and air from flat boxes, dryers, wires, felts, suction rolls and similar equipment. It is standard equipment in over 500 mills, making over 80% of the country's total production of paper.
THE NASH ENGINEERING COMPANY
South Norwalk, Connecticut

WIECKERT COGS
Made of Hard Maple
WILL STAND THE STRAIN
THEY WEAR LONGER
WIECKERT LUMBER CO.
Cogs of All Kinds
NEENAH, WISCONSIN

Established 1895
DANIEL M. HICKS
(INCORPORATED)
PAPER MILL SUPPLIES
200 FIFTH AVENUE, NEW YORK CITY

F. L. Smithe Machine Co., Inc.
Manufacturers of
Envelope Machinery
for making any style envelope, regular or special. Printed, stamped, embossed and tissue lined envelopes. Also die presses, tension machines, metal clasp machines, and all other machinery used in making envelopes.
633 West 44th Street New York, N. Y.

GENERAL Aluminum Sulphate CHEMICAL
GENERAL CHEMICAL COMPANY 40 RECTOR STREET, NEW YORK

BELLE ALKALI COMPANY, BELLE, W. Va.
PURE CHLORINE
In cylinders and tanks
BLEACH
BELLE BRAND
CAUSTIC SODA
76%—Solid and Flake
Arnold, Hoffman & Co. Inc., Sole Agents
PROVIDENCE BOSTON NEW YORK
PHILADELPHIA CHARLOTTE

Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, August 25, 1926.

During the past week, a moderate volume of business was transacted in the local chemical market. In most instances, prices are being firmly maintained by the leading manufacturers, although there have been some rumors of concessions on desirable orders. Contract withdrawals continue to move at a fairly steady pace, and the record for the month will probably compare favorably with the corresponding period of a year ago. Inquiries for future business have been frequent, and the view is expressed that the demand for the various grades of paper makers' chemicals should begin to expand very shortly.

BLANC FIXE.—Conditions in the blanc fixe market are practically unchanged. The demand for both the pulp and the powder is rather quiet at present, but quotations are holding up to schedule in a satisfactory manner. The pulp is still selling at $56 a ton, in bulk, and the powder is offered at from 4 to 4¼ cents a pound, in barrels, at works.

BLEACHING POWDER.—Shipments of bleaching powder against contract are being well maintained. Stocks of bleaching powder are said to be limited, and production is being adjusted to take care of the prevailing consumption, without creating any undesirable surplus. Bleaching powder is offered at from $2 to $2.40 per 100 pounds, in large drums, at works, according to quantity.

CASEIN.—Offerings of casein are more liberal than for some time past, and the market is much easier. The demand from the paper mills, at present, is mainly along routine lines. During the past week quotations on both the domestic and the imported product declined half a cent per pound. Domestic casein is now offered at from 16 to 19 cents a pound, while imported casein is quoted at from 17 to 19 cents a pound.

CAUSTIC SODA.—Consumption of caustic soda is being steadily maintained and shipments of contract deliveries are moving in good volume. The spot market shows signs of improvement and prices are somewhat steadier. Caustic soda is still offered at from $3.10 to $3.15 per 100 pounds, in large drums, at works. Spot car lots are quoted at from $3.20 to $3.25 per 100 pounds.

CHINA CLAY.—Quietness prevails in the china clay market. Shipments against contract, however, are going forward at a normal rate. Prices of both the imported and domestic product remain steady. Domestic washed clay is quoted at from $8 to $9 a ton, at mine, and pulverized at $10 per ton. Imported china clay is still selling at from $13 to $22 a ton, in bulk, ship side.

CHLORINE.—Demand for chlorine continues along routine lines. Contract shipments are still going forward at a satisfactory rate. The position of the chlorine market is very sound, and prices are holding up to schedule in a satisfactory manner. Chlorine is still quoted at 4 cents a pound, in tanks, or multi-unit cars, at works, on contract while the spot price is from 4¼ to 4¾ cents a pound.

ROSIN.—The rosin market continues to fluctuate. A steady inquiry is reported for the various grades of this product, and the prevailing tone is very firm. At the naval stores, the grades of rosin mostly used in the paper mills are now being offered at from $15.30 to $15.75 per 280 pounds, ex dock, in barrels.

SALT CAKE.—The position of the salt cake market is very strong, and the demand for supplies is quite persistent. Offerings, however, are rather limited, and quotations remain very steady. Contract shipments are still moving in good volume. Salt cake is offered at from $18 to $20 a ton, in bulk, at works.

SODA ASH.—Production of soda ash continues on a broad scale, and is being absorbed by consumers in a steady manner. The movement of shipments against contract shows no decline from the former volume. A fair amount of business was transacted in the spot market during the past week, at steady prices. Contract quotations, in car lots, at works, per 100 pounds, are as follows: in bulk, $1.25; in bags, $1.38; and in barrels, $1.65.

STARCH.—Trading in the starch market during the past week was well maintained and the demand was very steady. Prices remain unchanged at the recently reported levels. Supplies continue to move into consumption at an excellent rate. Special paper makers' starch is still quoted at $3.42 per 100 pounds, and at $3.59 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—Conditions in the sulphate of alumina market are practically unchanged. Contract withdrawals are moving in a normal manner for the season. Prices are unaltered. Commercial grades of sulphate of alumina are selling at from $1.40 to $1.45, in bags, at works, in car lots. The iron free is quoted at from $2 to $2.05 per 100 pounds, in bags, at works.

SULPHUR.—While trading in the sulphur market during the past week was less active than formerly, the position of the industry remains very sound. Prices are holding up to schedule, and reports of concessions are practically non-existent. Stocks in hand are reported to be ample, and quite sufficient to take care of all current demands. Sulphur is selling at from $18 to $19 a ton, in bulk, at mine, and at from $21 to $23 a ton, ship side.

TALC.—The talc market continues to exhibit a sound undertone. Demand from the paper mills is mostly routine, but is normal for this time of the year. No changes have been reported in prices. The quotations on domestic talc ranges from $16 to $18 a ton, at eastern mines. French talc is still selling at from $18 to $22 a ton, ship side.

To Convert Fir Slabs Into Paper

The first plant in Oregon to convert fir slabs into kraft pulp and paper is being built by the St. Helens Pulp and Paper Company at St. Helens, Oregon. Slab refuse from the saw mills in the vicinity will be used.

The refuse slabs will be sorted and, after removing the bark, converted into chips of the proper size for digesters. The chips will then be transported by barges on the Columbia River to the paper mill where they will be stored until it is desired to put them through the digesters. A number of intricate problems are involved in this method.

Power for the mill will be supplied by a 60-cycle turbine generator rated 1,500 kilowatts at 80 per cent power factor delivering current at 480 volts, 3 phase. The turbine will be arranged to operate at 225 pounds gauge steam pressure, with dry steam, and two-inch absolute back pressure. Steam at about 20 pounds gauge pressure will be extracted from one of the first stages of the turbine, this steam being used for heating the plant and for process work in the mill. The extracted steam will be maintained constant by an automatic extraction mechanism built by the General Electric Company, who will supply the complete electrical equipment for the mill, including the turbine.

W. T. Hunt Visits Mills In East

[FROM OUR REGULAR CORRESPONDENT]

LOS ANGELES, Cal., August 19, 1926.—As soon as Willis C. Hunt, president of the Pioneer Paper Company, Los Angeles, returns from a five weeks' trip which he is now taking in the East, upon which it is his intention to visit many of the largest paper plants in the Eastern part of the country, new equipment to cost approximately $125,000 is to be installed in the plant. A new building, 60 x 209 feet, which practically will double the capacity of the plant, will be erected at once and part at least of the new machinery will be installed therein. The new equipment is said to be of the very latest design and in especial a new shingle machine will be installed, which is said to weigh 20,000 pounds and to be the second one of the kind ever built. The business of the Pioneer Paper Company is expanding very rapidly and the addition to the company's manufacturing facilities is thereby rendered imperatively necessary.